

## ELECTRIC LIGHT AND POWER INDUSTRY: 1937

---

### INTRODUCTION AND GENERAL EXPLANATIONS

**Scope of the census.**—The Electric Light and Power industry is one of the four distinct industries covered by the Census of Electrical Industries, which has been taken quinquennially since 1902. The other three industries are street railways, telephones, and telegraphs. This report presents statistics for the Electric Light and Power industry. Separate reports are issued for each of the other industries.

**Earlier censuses.**—Prior to the year 1902, two partial canvasses of the Electric Light and Power industry were made. The first, which was taken in connection with the census of manufactures in 1890, covered only the State of New York and the city of St. Louis. At the second, which was made by the Commissioner of Labor in 1898, returns were obtained from 320 of the 460 known municipal plants and 632 of the 2,572 commercial plants then in existence.

**The schedule.**—The schedules used for collecting the data in the eight quinquennial censuses have been similar in general scope, but numerous changes in detail have been made from census to census. The 1937 schedule was drafted in conformity with the "Uniform system of accounts" prescribed by the Federal Power Commission for the use of public utilities and licensees under its jurisdiction, and the balance sheet, income and expense statement, and disposal of energy items in the schedule carried these account numbers. (For the titles of these account numbers, see appendix, p. 79.) The schedule contained 11 inquiries and covered data on generating facilities by type of prime mover, source of energy (whether generated, purchased, or received from other sources), fuel used in generation of electric energy, disposal of energy by class of service, employment, financial trends (including balance sheet and income statement and dividend appropriations), and other data relevant to the industry. The majority of the items called for separate State statistics but, due to the fact that the accounting systems of many companies operating in more than one State do not segregate accounts by States, the reporting establishments were not required to submit separate State data for certain inquiries, namely, the condensed balance sheet, income statement and dividend appropriations, employees, salaries, and wages.

**Area and period covered.**—The census of electric light and power industry covered the 48 States and the District of Columbia, no canvass of the outlying possessions having been made. The statistics compiled from the returns of this census relate, as a rule, to the calendar year 1937. In some cases, however, returns were accepted for the fiscal year where the reporting company operated on that basis. Data also have been included for establishments which were in operation during periods of less than 12 months, namely, (1) new plants, or successors to old plants which started operations during the calendar

year 1937; (2) plants which were idle during a part of the year; (3) those which passed out of existence within the year; and (4) those which were succeeded by other companies within the year.

**Definition of establishment.**—The term "establishment" as used in this report signifies a plant or plants operated under single ownership. It may comprise one or more generating stations, together with distributing equipment; or it may comprise generating equipment only where an establishment sells its entire output to other companies for distribution; or it may consist of concerns that purchase their entire output and distribute it. A company operating several subsidiary companies may submit a combined report covering their entire operations, providing these operations are all in one State. However, a company operating in more than one State is required to submit a separate report for each State, and each report is considered by the Bureau of the Census as coming from an establishment. The number of establishments reported for 1937 was 3,501. Of this number, 1,812 reported generation of energy while 1,689 reported distribution only. However, there were 4,027 separate generating stations reported for 1937. The term "composite" generating plant or station refers to one having more than one type of prime mover.

**Character of establishments canvassed.**—The statistics in this report relate to all establishments which were engaged during any portion of the calendar year 1937 in the generation and distribution of electric energy to public or private consumers; or in the generation of current for sale to other light and power companies for distribution; or in the distribution of current generated by plants under other ownership; or in the transmission of electric energy for private or public use. The statistics do not include establishments which consume all current generated, such as manufacturing and mining companies, railroads, railways, hotels, and other enterprises not in the nature of public utilities, unless a portion of their generated output is sold commercially.

**Classification of establishments.**—In this report, electric light and power establishments are classified in four ways.

(1) **Reporting sources.**—This classification, which appears for the first time in this report, is divided into the following subclassifications: Privately owned electric utilities, municipally owned electric utilities, cooperatives and power districts, Federal and State projects, and other sources. Statistics for the industry by reporting sources are presented in chapter II, where a more detailed description of this classification may be found. The term "all sources" signifies all establishments reporting.

(2) **Purely electric and composite.**—Purely electric establishments are those engaged exclusively in the generation or in the distribution, or in both the generation and the distribution of electric energy. Composite establishments, as defined by the Bureau of the Census, are those that not only generate or distribute electric energy, but, in addition, carry on other utility activities in connection with electric service, such as the operation of electric railways, the manufacture of gas or ice, the operation of water works, etc. Where the nonelectric operations were merely incidental to the electric operations, the report was accepted with or without data covering the separate activities of the reporting company, in accordance with its system of accounts. Where the nonelectric business was of considerable importance, careful estimates were obtained, if possible, in order that the statistics might relate only to the electric light and power operations, but in a few cases of this kind, where it was impossible to obtain satisfactory segregation of the data for the electrical business, the returns necessarily covered all the activities of the establishments reporting.

(3) **Generating and purchasing.**—Generating establishments are those which produce all or any part of their output in their own generating stations. Purchasing establishments are those which purchase all the current distributed by

them during the census year, even though they may have maintained generating equipment not in use.

(4) **Fuel-burning and hydroelectric.**—No attempt has been made in this report to make a classification of fuel-burning and hydroelectric establishments as such. However, in chapter IV, in view of the fact that a large part of the industry's water-power development is found in establishments operating both hydroelectric and fuel-burning plants, with widely varying ratios of rated power, statistics are presented in several groupings. These groupings make possible a variety of comparisons, both between the groups and with previously published statistics. There is, however, considerable overlapping, since data reported by an establishment may be included in more than one group.

## Chapter I.—THE INDUSTRY AS A WHOLE

This chapter presents detailed statistics for the industry as a whole, as compiled from the returns of all reporting establishments, and includes statistics on physical equipment—prime movers, generators, and transmission systems and primary distribution lines—fuel consumed in electric generation, source and disposal of energy, segregation of sales and revenue by customer groups, consolidated balance sheet, consolidated income statement and dividend appropriations, and employment. The term "all establishments" signifies all establishments reporting. Spatial limitations made necessary the exclusion, to a great extent, of statistics for earlier censuses. However, table 1 presents summary statistics for the last 3 census years, 1937, 1932, and 1927, showing major trends within the industry during the 10-year period.

**Summarization of the industry.**—It is noted that the electric light and power industry showed increases in the majority of items. This is reflected in the total rated capacity of prime movers, which reported an increase of 40.6 percent in the 10-year period, 1927–37, and an increase of 4.7 percent in the 5-year period, 1932–37. The total rated capacity of generators showed increases of 41.3 and 5.4 percent for the corresponding periods. The total amount of energy generated during 1937 amounted to 121,097,430,896 kilowatt-hours, as compared with 79,657,466,651 kilowatt-hours for 1932, an increase of 52.0 percent, and 74,686,378,010 kilowatt-hours for 1927, an increase of 62.1 percent. Total sales of energy (including sales to ultimate consumers and sales for resale) increased 50.6 percent in the 1932–37 period, and 68.2 percent in the 1927–37 period, while the number of customers served showed an increase of 24.9 percent in the corresponding decade. Sales of energy to ultimate consumers increased 56.4 and 62.0 percent in the 5- and 10-year periods, respectively. The number of establishments, however, decreased 19.2 percent in the 10-year period, and increased 2.1 percent in the 5-year period.

**Prime movers.**—Steam turbines retained their position as the dominant prime mover in the industry in point of total horsepower capacity although, as in previous censuses, they were outnumbered by hydroturbines and internal-combustion engines. Of the total horsepower of all prime movers, steam turbines represented 66.1 percent, hydroturbines 30.3 percent, internal-combustion engines 2.2 percent, and steam engines 1.4 percent. With the exception of steam engines, which showed a decrease of 28.4 percent, the total horsepower capacity of all prime movers showed marked increases in the 1927–37 period; internal-combustion engines increased 100.7 percent; hydroturbines, 54.7 percent; and steam turbines, 36.4 percent during this period. In the 1932–37 period, all types of prime movers showed small increases in horsepower capacity, with internal-combustion engines reporting the largest increase (24.9 percent). No statistics on horsepower by size groups are available, since the 1937 schedule did not call for these data.

For the first time, statistics on internal-combustion engines include a segregation of figures for "Diesel and semi-Diesel engines" and "Other internal-combustion engines (gas, gasoline, etc.)." The former group reported 88.2 percent of the total number of internal-combustion engines and 91 percent of their horsepower capacity.

**Idle equipment.**—Statistics for number and capacity of prime movers and generators as presented in the several tables of this report include 1,803 prime movers with a combined capacity of 2,982,364 horsepower, and 1,810 generators with a combined capacity of 2,181,446 kilowatts, which were reported as ordinarily idle but held as standby equipment.

**Fuel consumed per kilowatt-hour.**—Increased efficiency in the operation of generating units, resulting in a greatly increased output of electric power per pound of fuel, is noted in table 3, which presents statistics on fuel consumed in electric generation, and reduces fuels, other than bituminous coal, to a bituminous-coal equivalent. The several unit heat values, furnished by the Bureau of Mines, appear in footnote 1 of this table. The consumption of bituminous coal, or its equivalent, per kilowatt-hour of energy generated, was 1.39 pounds for 1937 as compared with 1.47 pounds for 1932, and 1.84 pounds for 1927. Bituminous coal is by far the leading fuel used in the industry, representing 77.1 percent of the total consumed, while natural gas is second in importance, reporting 12.4 percent of the total. However, in the 1932-37 period, the amount of natural gas used for electric generation showed an increase of 65.5 percent as compared with a 55.7 percent increase in bituminous coal. The computed fuel consumption of 1.39 pounds of coal per kilowatt-hour differs slightly from that reported by the Federal Power Commission for the same year. In the Census report, data for some energy produced in wood-burning plants have been included, but no corresponding figures for fuel were available. There may also be some differences in the assumed coal-equivalent of oil and gas in the two sets of figures. The preliminary estimate of the Federal Power Commission for 1937 is 1.42 pounds of coal per kilowatt-hour.

**Transmission systems and primary distribution lines.**—Table 11 presents statistics for circuit miles of transmission systems and primary distribution lines, by individual voltages rather than by voltage groups, by type of system, whether overhead (pole lines or steel tower) or underground. In addition to the total of 563,346 circuit miles given in this table, a considerable amount was reported as "other" without specifying the voltage. After analysis of these data and their comparison with other published statistics on transmissions, it was decided not to include these figures in the final report, as it was believed that in some cases the amount represented miles of secondary distribution lines rather than miles of transmission or primary distribution lines.

**Reduction in transmission losses.**—The increasing tendency toward concentration of power-producing equipment in large plants near load centers is reflected by the data on the relationship of transmission and distribution losses to total output. The reduction in such losses has apparently offset the higher losses that might be expected to accompany the operation of several large hydro developments more removed from the market center. It is noteworthy therefore that line losses have decreased in the last three censuses. In 1927 losses in transmission, distribution, etc., were 12.9 percent of the total output; in 1932,

12.3 percent; and in 1937 the reports indicate a loss of only 10.6 percent.

**Source of energy.**—The total amount of energy for disposal was reported as 168,299,656,881 kilowatt-hours. The source of this energy, as reported, showed 121,097,430,896 kilowatt-hours generated within the industry. Energy produced by steam power represented 61.3 percent of the total amount generated, energy generated by water power, 37.8 percent, while energy produced by generators driven by internal-combustion engines represented less than 1 percent of the total amount generated, although this type showed the greatest percent of increase in the 10-year period, 1927-37 (88.7 percent). Generated output by steam power and by hydropower showed increases of 63.6 and 59.4 percent, respectively, in the same period. The statistics for generated output exclude energy generated for station use.

The balance of energy for disposal, amounting to 47,202,225,985 kilowatt-hours, was reported as purchased or received from other sources. Of this amount, 34,110,614,947 kilowatt-hours were reported as purchased either from other electric systems or from other sources; 10,495,948,112 kilowatt-hours were reported as received from own system outside the State; and 2,595,662,926 kilowatt-hours were reported as other receipts of energy. It is obvious that "energy purchased from other electric systems" or "received from own system outside State" would be duplicated in the generated output reported by other companies. It is also probable that energy purchased from other sources, and other receipts of energy, duplicated, to a large extent, the generated output of other companies, since the scope of the census includes, as a part of the industry, all establishments that sell energy commercially. The only energy reported in these two items, not included in the generated output of the reporting companies of the industry, could have been either generating plants not located in the United States, or possibly manufacturing or similar establishments, that disposed of their surplus energy, but which were inadvertently omitted from the canvass for the Electric Light and Power Industry census.

**Sales to ultimate consumers.**—The disposal of energy inquiry on the 1937 schedule differed materially from the class of service items included in the schedules used for the two preceding censuses. Residential or domestic sales were divided into "farm" and "nonfarm" for 1937; "small light and power (retail)," and "large light and power (wholesale)," formerly reported as separate items, were combined for 1937 as "commercial and industrial sales," which were divided into "farm" and "nonfarm." A new class of service, "Rural—distinct rural rates only," divided into "farm" and "nonfarm" was established. This classification covering Account No. 601, of the "Uniform system of accounts," represented, to a great extent, commercial sales; although it doubtless included some domestic and residential sales. The "municipal street lighting" item was revised to "public street and highway lighting" for 1937. In addition, sales to ultimate consumers included three other classifications, namely, "Other sales to public authorities," "Interdepartmental," and "Other sales to ultimate consumers."

**Energy consumed by class of service.**—While nonfarm residential and domestic service constituted 79.3 percent of the total number of customers served, 12.6 percent of the total kilowatt-hours sold, and 30.8 percent of the total revenue from electric service, nonfarm com-

mmercial and industrial service represented 15.2 percent of the total number of customers, 52.6 percent of the total kilowatt-hours sold, and 50.5 percent of the total revenue for electric service.

**Farm service.**—Table 6 presents comparative statistics on energy sold as "Farm service," covering the years 1937, 1932, and 1927. Statistics for farm service were first published in the 1927 report and presented combined figures on farm service (all uses). The schedule for 1937 divided farm service into "Residential and domestic sales," "Commercial and industrial sales," and "Rural—distinct rural rates only."

Comparison of the average rate per kilowatt-hour for farm service in 1937 with the corresponding averages for 1927 indicates an apparent increase from 2.1 to 2.7 cents per kilowatt-hour. While separate statistics for earlier years are not available as to sales for domestic use and sales at wholesale rates for other purposes (notably irrigation pumping), examination of the regional figures shows that the former have increased much more than the latter, and therefore now have a greater influence on the national average rate. Because of this shift in magnitudes, the average rates for the various years are not strictly comparable.

**Sales for resale.**—Of the 29,859,113,130 kilowatt-hours reported as sold for resale, 91.4 percent were reported as sold to other electric companies, 8.2 percent to municipal or distribution systems, while sales to mutual or cooperative undertakings and other sales for resale each represented two-tenths of 1 percent.

**Energy not reported as sold.**—In addition to the 132,929,517,239 kilowatt-hours reported as sold, either to ultimate consumers, or for resale, industry statistics include 17,455,852,972 kilowatt-hours of energy not reported as sold. The following shows the percent distribution of this amount: Free service, 1.7 percent; energy used by reporting company, 11.0 percent; energy sent to same company in other States, 59.8 percent; and other transfers, 27.5 percent.

**Consolidated balance sheet.**—The schedule for 1937 called for a balance sheet as of December 31, 1937. Companies operating on a fiscal year basis reported these statistics as of the last day of their fiscal year. The existence of numerous composite companies, that is, those rendering other public-utilties service in addition to the sale of electric energy, makes it difficult to determine accurately the investment in the electric light and power industry. The schedule, however, called for separate statistics on the value of the utility plant, whether electric, gas, electric railways, or other utility plants, and the reporting establishments were requested to estimate the value of their several plants if actual figures were not available. The total value of electric-utility plants was reported as \$12,940,993,328, an increase of 39.2 percent in the 1927-37 period, and an increase of 2.2 percent in the 5-year period 1932-37. The total value of all utility plants was \$15,270,638,573, which was distributed as follows: Electric plants, 84.7 percent; gas plants, 9.1 percent; electric railway plants, 1.7 percent; and other utility plants, 4.5 percent.

With the exception of the values of utility plants, noted above, all other items of the balance sheet covered the entire operations of the reporting companies and included statistics for their nonelectric activities as well as those for electric-utility service. No statistics, by States, are available, since reporting companies, operating in more

than one State, submitted a combined balance sheet covering their entire operations.

**Consolidated income statement and dividend appropriations.**—Table 9 presents detailed statistics on a consolidated income, operating revenue, and operating expense statement, for all establishments reporting, with a separation of statistics for the various items, whether "electric light and power" operations or "other utility" operations. Electric operating revenues amounting to \$2,390,856,709, represented \$2,356,513,119 reported as revenue for total sales of electric energy and \$34,343,590, reported as other electric revenue. Electric operating expenses amounted to \$1,042,192,680, and were distributed as follows: Cost of fuel, 17.4 percent; purchased and interchanged power, 18.1 percent; maintenance expense, 14.3 percent; and other operating expenses, 50.1 percent. The schedule for 1937 did not require a separation of electric light and power data from those of other utilities on the following items: Other income, income deductions (including interest on long-term debt, amortization of debt discount or premium, and expense, and other income deductions), and net income. Therefore, the statistics published for these items include not only electric light and power but the reporting companies' entire operations. The net income for 1937 amounted to \$570,093,927, a decrease of less than 1 percent, as compared with \$575,671,404, the amount reported for 1932. The total amount of dividend appropriations reported by incorporated companies was \$434,995,474, of which \$126,327,678 represented dividends on preferred stock and \$308,667,796, dividends on common stock.

**Employees and salaries and wages.**—The number of employees in the industry covering both salaried employees and wage earners was reported as 281,335 on June 30, 1937, and 276,834 on December 31. The salaries and wages or pay roll amounted to \$470,353,487 for the year 1937. The above pay roll includes in addition to the amount of salaries and wages chargeable to operating expenses (electrical department) the portion of such pay roll as may have been charged to construction, utility plant account, etc. No data are included in the foregoing figures for employees engaged exclusively in construction work. In the report for 1932 only the amount of the salaries and wages chargeable to operating expenses was reported. The amount of the pay roll or salaries and wages as reported for 1937 are therefore not comparable with the 1932 figures. The data covering number of employees as reported for 1937 are on a comparable basis with earlier periods except for 1927 when only the larger municipal establishments reported salary and wage data. Except for the private industry in which the 1937 and 1927 data are comparable, no true comparison on compensation per employee is available for the period 1927 through 1937 for the industry as a whole.

TABLE 1.—SUMMARY FOR THE ELECTRIC LIGHT AND POWER INDUSTRY, ALL ESTABLISHMENTS: 1937, 1932, AND 1927

ITEM	1937	1932	1927
Number of reporting establishments, total.....	3,501	3,429	4,335
Generating all or part of current.....	1,812	1,788	2,331
Distributing or transmitting only.....	1,689	1,641	2,004
Number of separate generating stations, total.....	14,027	4,339	4,801
Prime movers:			
Total number.....	10,824	11,185	12,030
Total horsepower.....	50,220,081	47,966,962	35,710,128
Steam engines—			
Number.....	854	1,299	2,267
Horsepower.....	711,987	649,476	994,273
Steam turbines—			
Number.....	2,727	2,822	2,864
Horsepower.....	33,177,336	32,904,158	24,323,304
Internal-combustion engines—			
Number.....	3,495	3,298	3,177
Horsepower.....	1,100,561	881,301	548,288
Hydroturbines and water wheels—			
Number.....	3,748	3,766	3,722
Horsepower.....	15,230,197	13,532,027	9,844,263
Generators, by type of prime mover:			
Total number.....	10,721	11,111	11,967
Total kilowatt capacity (rated).....	36,481,107	34,622,554	25,811,305
Steam engines—			
Number.....	861	1,201	2,294
Kilowatt capacity.....	520,929	452,582	697,136
Steam turbines—			
Number.....	2,725	2,820	2,886
Kilowatt capacity.....	24,590,706	24,032,842	17,848,124
Internal-combustion engines—			
Number.....	3,490	3,274	3,189
Kilowatt capacity.....	762,010	597,628	416,533
Hydroturbines and water wheels—			
Number.....	3,645	3,717	3,598
Kilowatt capacity.....	10,598,462	9,539,502	6,849,512
Output, <sup>2</sup> kilowatt-hours, total.....	168,299,656,881	111,715,765,636	96,828,633,719
Reported as generated, total.....	121,097,430,896	79,657,466,651	74,686,378,010
By steam.....	74,229,700,198	45,374,573,980	45,391,190,914
By internal-combustion.....	1,080,018,580	715,142,922	577,048,087
By water.....	45,778,700,118	33,567,449,749	28,718,138,409
Reported as purchased or received from other sources.....	47,202,225,985	32,058,298,985	22,142,255,709
Number of customers, total.....	27,219,362	23,861,642	21,700,238
Ultimate consumers.....	27,216,336	23,858,411	21,786,317
Resale.....	3,026	3,231	3,921
Revenue from electric service, total.....	\$2,356,513,119	\$1,975,303,955	\$1,802,655,493
Ultimate consumers.....	\$2,177,617,063	\$1,821,105,524	\$1,607,045,571
Resale.....	\$178,890,056	\$154,198,431	\$135,609,922
Kilowatt-hours sold, total.....	132,929,517,239	88,265,073,126	79,011,210,518
Ultimate consumers.....	103,070,404,100	65,895,975,835	63,612,481,088
Resale.....	29,859,113,130	22,369,097,291	15,398,729,430
Kilowatt-hours distributed for other purposes (non-revenue), total.....	35,370,139,642	23,450,692,510	17,817,423,201
Not reported sold, total.....	17,455,852,972	9,758,627,065	5,341,521,615
Free service.....	304,402,645	379,421,146	509,287,430
Energy used by reporting establishments.....	1,919,335,537	1,460,474,092	1,800,108,110
Energy sent out of State in which generated, not reported as sold.....	10,439,555,803	4,962,049,578	2,972,126,075
Other transfers.....	4,792,558,897	2,950,682,249	-----
Energy lost in transmission, distribution, conversion, etc.....	17,914,286,670	13,692,065,445	12,475,901,586
Percent loss (based on total output).....	10.6	12.3	12.9

<sup>1</sup> Includes 1,112 stations operated by steam; 1,283 by internal-combustion; 1,426 by water; and 206 composite (stations having more than 1 type of prime mover).

<sup>2</sup> Includes generated output and energy purchased and received from other sources. Since the energy "Received from other sources" was, in a large part, purchased from other electric light and power companies, a considerable duplication is involved, as such energy would also be included in the "Generated."

TABLE 1.—SUMMARY FOR THE ELECTRIC LIGHT AND POWER INDUSTRY, ALL ESTABLISHMENTS: 1937, 1932 AND 1927—Continued

ITEM	1937	1932	1927
Employees:			
Number on June 30.....	281,335	244,573	251,020
Number on Dec. 31.....	276,834	(3)	(3)
Salaries and wages.....	\$470,353,487	\$323,880,386	\$367,631,756
Operating expenses (includes cost of fuel, purchased and interchanged power, maintenance and other operating expenses).....	\$1,042,192,680	\$803,100,258	\$750,483,581
Value of electric utility plant.....	\$12,940,993,328	\$12,664,376,952	\$9,297,458,356
Fuel used for electric generation: <sup>7</sup>			
Coal, anthracite (tons, 2,000 pounds).....	2,023,995	1,559,085	2,002,216
Coal, bituminous (tons, 2,000 pounds).....	40,468,929	25,998,430	35,681,314
Coke (tons, 2,000 pounds).....	88,129	152,841	31,623
Fuel oil (barrels, 42 gallons).....	13,896,422		
Gasoline (barrels, 42 gallons).....	2,556	7,867,985	7,145,798
Gas, manufactured (1,000 cubic feet).....	4,877,648	1,936,336	6,160,753
Gas, natural (1,000 cubic feet).....	159,453,251	96,365,128	59,362,039

<sup>3</sup> Not called for on schedule.<sup>4</sup> Not comparable with figures for 1937 and 1927 since amount includes only salaries and wages chargeable to electric operating expenses.<sup>5</sup> Reported by commercial establishments only. No data for municipal establishments.<sup>6</sup> Includes value of plant and equipment, \$902,057,279, owned by companies engaged in the operation of electric light and power plants and other public utilities, not distributed among the several utilities.<sup>7</sup> In addition, hogged fuel, sawmill, and other waste were reported.

TABLE 2.—PRIME MOVERS AND GENERATORS AS OF DEC. 31, 1937—NUMBER AND RATED CAPACITY BY TYPE OF PRIME MOVERS, ALL ESTABLISHMENTS: 1937

TYPE OF PRIME MOVER	PRIME MOVERS			
	Number	Horsepower	Percent distribution	
			Number	Horsepower
All equipment available for use, active and idle.....	10,824	50,220,081	100.0	100.0
Steam engines.....	854	711,987	7.9	1.4
Steam turbines.....	2,727	33,177,336	25.2	60.1
Internal-combustion engines:				
Diesel and semi-Diesel.....	3,083	1,001,691	28.5	2.0
Other internal-combustion engines (gas, gasoline, etc.).....	412	98,870	3.8	.2
Hydroturbines and water wheels.....	3,748	15,230,107	34.6	30.3
Equipment included above, ordinarily idle but held for standby (not junk).....	1,803	2,982,364	16.7	5.9
GENERATORS				
	Number	Capacity (kilowatts)	Percent distribution	
			Number	Kilowatt-rating
	10,721	36,481,107	100.0	100.0
All equipment available for use, active and idle.....				
Steam engines.....	861	520,929	8.0	1.4
Steam turbines.....	2,725	24,599,706	25.4	67.4
Internal-combustion engines:				
Diesel and semi-Diesel.....	3,077	694,283	28.7	1.9
Other internal-combustion engines (gas, gasoline, etc.).....	413	67,727	3.9	.2
Hydroturbines and water wheels.....	3,645	10,598,462	34.0	29.1
Equipment included above, ordinarily idle but held for standby (not junk).....	1,810	2,181,446	16.9	6.0

TABLE 3.—CONSUMPTION OF FUEL, BY KIND, WITH BITUMINOUS COAL EQUIVALENT, ALL ESTABLISHMENTS: 1937

KIND	Unit of measure	Quantity	Equivalent tons of bituminous coal <sup>1</sup>	Percent of total equivalent fuel
Anthracite coal.....	Ton (2,000 pounds).....	2,023,995	2,100,907	4.0
Bituminous coal.....	do.....	40,468,929	40,468,929	77.1
Coke.....	do.....	88,129	88,129	.2
Fuel oil.....	Barrel (42 gallons).....	13,896,422	3,182,281	6.1
Gasoline.....	do.....	2,556	511	
Gas, manufactured.....	1,000 cubic feet.....	4,877,648	107,308	.2
Gas, natural.....	do.....	159,453,251	6,537,583	12.4
Total equivalent fuel.....	Ton (2,000 pounds).....		52,485,648	100.0
Kilowatt-hours generated by fuel-burning generating stations.....	Kilowatt-hours.....	75,318,724,778		
Pounds of coal per kilowatt-hour of output.....			1.30	

<sup>1</sup> The quantities of the several fuels other than bituminous coal have been reduced to equivalent tons (2,000 pounds) of bituminous coal by employing the following unit heat values, furnished by the Bureau of Mines: Anthracite, 13,600 B. t. u. per pound; bituminous, 13,100 B. t. u. per pound; coke, 13,100 B. t. u. per pound; fuel oil, 6,000,000 B. t. u. per 42-gallon barrel; gasoline, 5,250,000 B. t. u. per 42-gallon barrel; manufactured gas, 575 B. t. u. per cubic foot; and natural gas, 1,075 B. t. u. per cubic foot.

TABLE 4.—GENERATED OUTPUT, KILOWATT-HOURS PER CAPITA, AND KILOWATT-HOURS PER KILOWATT CAPACITY, ALL ESTABLISHMENTS: 1937

ITEM	Kilowatt-hours
Output <sup>1</sup> (kilowatt-hours), total.....	168,290,656,881
Generated output, total.....	121,097,430,896
By steam.....	74,220,706,198
By internal-combustion.....	1,080,018,580
By water.....	45,778,706,118
Purchased or received from other sources.....	47,202,225,985
Generated output per capita <sup>2</sup> .....	968
Rated generator capacity (kilowatts).....	36,481,107
Kilowatt-hours per kilowatt capacity (based on generated output).....	3,319

<sup>1</sup> Includes generated output and energy purchased and received from other sources. Since the energy "Received from other sources" was, in large part, purchased from other electric light and power companies, a considerable duplication is involved, as such energy would also be included in the "Generated."

<sup>2</sup> Estimated population as of July 1, 1937, was 129,257,000.

TABLE 5.—SALES OF ELECTRIC ENERGY—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, ALL ESTABLISHMENTS: 1937

CLASS OF SERVICE	CUSTOMERS		CURRENT SOLD		
	Number	Percent distribution	Kilowatt-hours	Percent distribution	Average kilowatt-hours per customer
Total sales.....	27,210,362	100.0	132,929,517,230	100.0	4,884
Sales to ultimate consumers, total.....	27,216,336	99.9	103,070,404,109	77.5	3,787
Residential or domestic sales:					
Farm.....	615,130	2.3	666,635,455	.5	1,084
Nonfarm.....	21,589,895	79.3	16,815,223,038	12.6	779
Rural—distinct rural rates only:					
Farm.....	533,283	2.0	980,579,766	.7	1,822
Nonfarm.....	109,382	.6	306,371,552	.2	1,809
Commercial and industrial sales:					
Farm.....	61,984	.2	1,023,511,789	.8	16,513
Nonfarm.....	4,144,195	15.2	69,911,421,452	52.6	16,870
Public street and highway lighting.....	23,182	.1	2,035,658,836	1.5	87,812
Other sales to public authorities.....	69,458	.3	2,415,747,083	1.8	34,780
Sales to railroads and railways:					
Street and interurban railways.....	374	(1)	4,887,908,103	3.7	13,069,273
Electrified steam-railroad divisions.....	102	(1)	1,558,474,349	1.2	15,279,160
Interdepartmental.....	1,627	(1)	2,272,205,092	1.7	1,396,561
Other sales to ultimate consumers.....	2,718	(1)	196,667,594	.1	72,357
Sales for resale, total.....	3,026	(1)	29,859,113,130	22.5	9,867,519
Sales to other electric utilities:					
Municipal distribution systems.....	1,110	(1)	2,446,932,109	1.8	2,204,443
Mutual or cooperative undertakings.....	196	(1)	70,885,348	.1	361,660
Other electric companies.....	1,675	(1)	27,282,032,158	20.5	16,287,780
Other sales for resale.....	45	(1)	59,263,515	(1)	1,316,967
REVENUE FROM ELECTRIC SERVICE					
CLASS OF SERVICE	Amount	Percent distribution	Average per customer (dollars)	Average per kilowatt-hour (cents)	
Total sales.....	\$2,356,513,119	100.0	87	1.8	
Sales to ultimate consumers, total.....	2,177,617,063	92.4	80	2.1	
Residential or domestic sales:					
Farm.....	24,820,046	1.1	40	3.7	
Nonfarm.....	726,362,566	30.8	34	4.3	
Rural—distinct rural rates only:					
Farm.....	31,139,540	1.3	58	3.2	
Nonfarm.....	10,463,807	.4	62	3.4	
Commercial and industrial sales:					
Farm.....	15,196,765	.6	245	1.5	
Nonfarm.....	1,189,808,744	50.5	287	1.7	
Public street and highway lighting.....	73,859,468	3.1	3,188	3.6	
Other sales to public authorities.....	37,269,308	1.6	537	1.5	
Sales to railroads and railways:					
Street and interurban railways.....	42,472,996	1.8	113,564	.9	
Electrified steam-railroad divisions.....	14,043,062	.6	137,677	.9	
Interdepartmental.....	10,193,628	.4	6,265	.4	
Other sales to ultimate consumers.....	1,917,133	.1	705	1.0	
Sales for resale, total.....	178,896,056	7.6	59,120	.6	
Sales to other electric utilities:					
Municipal distribution systems.....	18,326,460	.8	16,510	.7	
Mutual or cooperative undertakings.....	478,789	(1)	2,443	.7	
Other electric companies.....	159,664,845	6.8	95,322	.6	
Other sales for resale.....	425,962	(1)	9,466	.7	

<sup>1</sup> Less than  $\frac{1}{10}$  of 1 percent.

TABLE 6.—FARM SERVICE—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, 1937, 1932, AND 1927, AND BY CLASS OF SERVICE, 1937

CLASS OF SERVICE	Census year	CUSTOMERS		CURRENT SOLD		
		Number	Percent distribution	Kilowatt-hours	Percent distribution	Average kilowatt-hours per customer
All uses, total.....	1937	1,215,403	100.0	2,670,727,010	100.0	2,197
Residential or domestic sales.....	1937	615,136	50.6	666,635,455	25.0	1,084
Distinct rural sales.....	1937	538,283	44.3	980,579,766	36.7	1,822
Commercial and industrial sales.....	1937	61,984	5.1	1,028,511,759	38.3	16,513
All uses, total.....	1932	613,753	100.0	1,504,257,106	100.0	2,451
All uses, total.....	1927	168,450	100.0	835,271,354	100.0	4,959

  

	Census year	REVENUE FROM ELECTRIC SERVICE			
		Amount	Percent distribution	Average per customer (dollars)	Average per kilowatt hour (cents)
All uses, total.....	1937	\$71,166,351	100.0	.59	2.7
Residential or domestic sales.....	1937	24,530,046	34.9	.40	3.7
Distinct rural sales.....	1937	31,139,540	43.8	.58	3.2
Commercial and industrial sales.....	1937	15,196,765	21.3	.245	1.5
All uses, total.....	1932	42,773,826	100.0	.70	2.8
All uses, total.....	1927	17,282,957	100.0	103	2.1

TABLE 7.—TOTAL OUTPUT; CURRENT SOLD TO ULTIMATE CONSUMERS AND FOR RESALE; BALANCE NOT SOLD, ACCORDING TO DISPOSAL, WITH PERCENT DISTRIBUTION, ALL ESTABLISHMENTS: 1937

ITEM	Kilowatt-hours	Percent distribution
Output, <sup>1</sup> total.....	168,299,656,881	100.0
Sales to ultimate consumer.....	103,070,404,109	61.2
Sales for resale.....	29,859,113,130	17.7
Energy not reported as sold, total.....	17,455,852,972	10.4
Energy used by reporting company.....	1,919,335,537	1.1
Free service.....	304,402,645	.2
To same company in other States.....	10,439,555,893	6.2
Any other transfers.....	4,792,558,897	2.8
Energy lost and unaccounted for.....	17,014,286,670	10.6

<sup>1</sup> Includes generated output and energy received from other sources. Since the energy "Received from other sources" was, in large part, purchased from other electric light and power companies, a considerable duplication is involved, as such energy would also be included in the "Generated."

TABLE 8.—CONSOLIDATED BALANCE SHEET FOR ALL ESTABLISHMENTS REPORTING, INCLUDING ASSETS AND LIABILITIES OF ALLIED NONELECTRIC UTILITIES AS OF DEC. 31, 1937<sup>1</sup>

ASSETS AND OTHER DEBITS		LIABILITIES AND OTHER CREDITS	
Utility plant, total.....	\$15,270,638,573	Capital stock.....	\$6,572,372,346
Electric.....	12,940,993,328	Investment of municipality or of unincorporated undertaking.....	287,638,519
Gas.....	1,384,708,889	Long-term debt.....	7,380,714,561
Electric railway.....	263,350,829	Current and accrued liabilities.....	745,308,466
Other.....	681,885,527	Deferred credits.....	51,629,176
Investments and funds.....	1,381,423,467	Reserve for depreciation of electric plant.....	1,512,802,994
Current and accrued assets.....	1,086,480,456	Other reserves.....	437,284,789
Deferred debits.....	505,573,444	Contributions in aid of construction.....	49,221,790
Capital stock discount and expense.....	33,599,327	Surplus.....	1,320,369,524
Reacquired securities.....	44,821,185	Total liabilities and other credits.....	18,357,372,165
Deficit.....	34,835,713		
Total assets and other debits.....	18,357,372,165		

<sup>1</sup> Companies operating on a fiscal-year basis reported balance-sheet statistics as of the last day of their fiscal year.

TABLE 9.—CONSOLIDATED INCOME, OPERATING-REVENUE AND EXPENSE STATEMENT, AND DIVIDEND APPROPRIATIONS FOR ALL ESTABLISHMENTS REPORTING: 1937

ACCOUNT	Total	Electric light and power	Other utilities
Operating revenues.....	\$2,807,880,868	\$2,390,856,709	\$417,033,159
Operating expenses.....	1,310,117,465	1,042,192,680	267,924,785
Depreciation.....	277,305,445	236,935,741	40,369,701
Taxes.....	363,424,130	315,717,933	47,706,197
Federal.....	121,905,254	112,801,411	9,133,843
Other.....	241,428,876	202,856,522	38,572,354
Other operating revenue deductions.....	1,874,954	1,078,399	796,555
Total operating revenue deductions.....	1,952,721,994	1,595,924,756	350,797,238
Net operating revenues.....	855,167,874	794,931,953	60,235,921
Income from utility plants leased to others.....	4,754,347	4,653,638	100,709
Total utility operating income.....	859,922,221	799,585,591	60,336,630
Other income.....	65,219,029	(2)	(2)
Gross income.....	925,141,250	(2)	(2)
Income deductions:			
Interest on long-term debt.....	306,602,369	(2)	(2)
Amortization of debt discount (or premium) and expense.....	20,210,139	(2)	(2)
Other income deductions.....	28,174,815	(2)	(2)
Total income deductions.....	355,047,323	(2)	(2)
Net income.....	570,093,927	(2)	(2)
DIVIDEND APPROPRIATIONS AND CASH DISTRIBUTIONS			Total
Dividend appropriations:			
Preferred stock.....			\$126,327,678
Common stock.....			308,667,796
Authorized cash distributions by unincorporated undertakings.....			16,180,776

<sup>1</sup> Includes cost of fuel, \$181,682,451; purchased and interchanged power, \$188,991,844; maintenance expense, \$149,104,580; and other operating expenses, \$522,413,805.

<sup>2</sup> Segregation of "Electric light and power" and "Other utilities" not called for on schedule.

TABLE 10.—SOURCE OF ENERGY—CURRENT GENERATED AND ENERGY RECEIVED FROM OTHER SOURCES, ALL ESTABLISHMENTS: 1937

ITEM	Kilowatt-hours	Percent distribution
Source of energy, total <sup>1</sup> .....	168,299,655,881	100.0
Reported as generated, total.....	121,097,430,806	72.0
By steam.....	74,220,706,198	44.1
By internal-combustion.....	1,084,018,580	.6
By water power.....	45,778,706,118	27.2
Reported as purchased, total.....	34,110,614,947	20.3
From other electric systems.....	32,640,935,135	19.4
From other sources.....	1,460,679,812	.9
Reported as received from own system outside State.....	10,495,948,112	6.2
Other receipts of energy.....	2,595,602,926	1.5

<sup>1</sup> Includes generated output and energy received from other sources. Since the energy "Received from other sources" was, in large part, purchased from other electric light and power companies, a considerable duplication is involved, as such energy would also be included in the "Generated."

TABLE 11.—TRANSMISSION SYSTEMS AND PRIMARY DISTRIBUTION LINES, MILES OF CIRCUIT, BY INDIVIDUAL VOLTAGE, ALL ESTABLISHMENTS: 1937

INDIVIDUAL VOLTAGE	Total	OVERHEAD			Under-ground
		Total	Pole line	Steel tower	
Miles of circuit.....	563,346	540,836	500,733	40,103	22,510
Voltage of 11,000 and over:					
220,000.....	2,058	2,058	91	1,867	-----
132,000.....	9,031	9,547	1,704	7,843	84
110,000.....	18,688	18,688	8,213	10,475	-----
66,000.....	31,413	31,199	23,002	8,197	214
60,000.....	5,456	5,456	4,394	1,062	-----
44,000.....	16,345	16,310	14,197	2,113	35
33,000.....	47,799	47,431	45,881	1,550	368
22,000.....	21,934	20,935	20,472	463	999
13,200.....	40,072	34,856	34,622	234	5,216
11,000.....	32,269	29,772	29,647	125	2,497
Voltage of less than 11,000:					
6,000.....	58,507	58,070	58,071	8	518
4,000.....	46,917	43,474	43,467	7	3,443
2,300.....	148,331	145,701	145,578	123	2,630
All other <sup>1</sup> .....	83,836	77,330	71,394	5,036	6,506

<sup>1</sup> "All other" includes:

Individual voltage	Miles of circuit						
154,000	639	24,000	2,637	11,500	75	4,800	16,329
100,000	3,389	23,000	1,523	11,400	81	4,600	7,019
88,000	899	17,000	605	10,000	105	4,400	1,398
55,000	1,125	16,500	614	8,000	294	4,160	377
50,000	1,793	16,000	1,373	7,620	219	4,150	282
38,000	1,057	13,800	849	7,200	871	3,300	168
27,000	823	13,000	1,452	6,900	11,959	2,400	7,288
26,400	1,832	12,000	6,006	5,000	384	2,200	471
25,000	233	11,950	124				

The remaining 9,563 miles represent 40 individual voltages which cannot be shown separately without disclosing the operations of individual establishments.

## Chapter II.—THE INDUSTRY, BY REPORTING SOURCES

In former census years, the electric light and power industry was divided into two major subclassifications: "Municipal," which included all municipally owned generating plants and distribution systems, and "Commercial," which covered all other establishments that came within the scope of the census.

As a result of the introduction since the last census of several new types of producers and distributors of electric energy and their subsequent inclusion in the census for 1937, the Bureau of the Census in collaboration with the Federal Power Commission, has established a new system of classification by reporting sources, dividing the total number of reporting establishments into the following five major groups:

- (1) Privately owned electric utilities.
- (2) Municipally owned electric utilities.
- (3) Cooperatives, power districts, etc.
- (4) Federal and State.
- (5) Other sources.

The fifth group, "Other sources," includes certain privately owned concerns such as manufacturing and mining companies, railways and railroads, together with some publicly owned properties such as United States national parks, State colleges, and municipal plants, not included in the "Municipally owned electric utilities" group, which are not primarily engaged in the manufacture and/or sale of electric energy.

**Comparison with Federal Power classifications.**—These classifications, it will be noted, differ slightly from those established by the Federal Power Commission. First, the survey conducted by the Bureau of the Census is more comprehensive in scope, obtaining reports from some small concerns which are not canvassed by the Federal Power Commission. Second, the Federal Power Commission includes statistics for "State" projects with "Cooperatives and power districts," and subdivides Federal projects into "Bureau of Reclamation" and "Other Federal projects." Third, the Census Bureau, in "Other sources," presents, in most cases, only that energy sold by the reporting companies while the survey made by the Federal Power Commission includes a much larger percentage of the total energy produced by these concerns, particularly in the case of railways and railroads.

The tables included in this chapter present summary statistics for the industry by reporting sources. Detailed statistics for the "Privately owned electric utilities" and "Municipally owned electric utilities" groups will be found in chapter V of this report.

Separate statistics for the other three groups, "Cooperatives, power districts, etc.," "Federal and State," and "Other sources," appear only in this chapter. Since most of the cooperative undertakings were in process of construction during the early part of 1937, and distribution lines were not energized until later in the year, the statistics

for this group, obviously do not represent an entire year's operations. Financial statistics, including balance-sheet and income-revenue and expense statements for the "Other sources" and "Federal and State" groups are incomplete since some of the establishments so classified were unable to separate their electrical operations from their normal activities. For these reasons, financial data for the three groups are not shown separately, although such data as reported have been included in the industry totals in other chapters.

**Comparison with earlier censuses.**—Statistics for "All sources" as shown in this chapter, are comparable with statistics presented in earlier censuses as "All establishments" or "The industry as a whole," since the statistics in each case cover the combined totals of all establishments reporting. Any differences would be only those resulting from the inclusion in the 1937 report of certain types of establishments that had not reported in previous censuses, notably "Federal and State projects" and "Cooperatives and power districts." Chapter V of this report includes a detailed explanation of the differences between "Municipally owned electric utilities," as classified in this report, and the "Municipal," of earlier censuses; and "Privately owned electric utilities" and the "Commercial" classification of previous censuses.

Table 15 presents statistics, by reporting sources, for purely electric and composite establishments. A description of the term "Purely electric and composite" establishments appears in "General explanations," p. 2.

TABLE 12.—GENERATING FACILITIES, GENERATED OUTPUT, AND FUEL CONSUMED, BY REPORTING SOURCES: 1937

	All sources	Privately owned electric utilities	Municipally owned electric utilities	Cooperatives, power districts, etc.	Federal and State	Other sources <sup>1</sup>
Number of reporting establishments, companies, or systems, total.....	2,3501	1,340	1,360	181	25	95
Number generating all or part of current.....	1,812	818	885	16	18	75
Number reporting distribution or transmission only.....	1,689	522	975	165	7	20
Number of generating stations.....	4,027	2,916	963	27	28	93
Steam.....						
Internal combustion.....	1,112	813	257	2	5	35
Water.....	1,283	748	523	4	21	6
Composite <sup>2</sup> .....	1,426	1,226	120	21	21	38
266	129	63	-----	-----	14	-----
Generators by type of prime mover:						
Total number.....	10,721	7,543	2,753	66	72	287
Total kilowatt capacity.....	32,102,918	2,489,847	147,294	859,046	782,572	-----
Steam engines—						
Number.....	861	528	292	41	2	38
Kilowatt capacity.....	520,929	417,368	90,676	1,500	430	10,955
Steam turbines—						
Number.....	2,725	2,060	562	41	8	94
Kilowatt capacity.....	24,599,706	22,844,364	1,400,608	1,000	65,300	308,434
Internal combustion—						
Number.....	3,490	1,835	1,622	8	4	21
Kilowatt capacity.....	702,010	381,001	373,698	2,362	1,991	2,953
Hydroturbines and water wheels—						
Number.....	3,645	3,120	277	56	58	134
Kilowatt capacity.....	10,598,462	8,570,186	634,365	142,362	701,325	460,225
10,121,097,430,896	109,919,648,965	5,253,820,904	765,847,582	1,954,041,242	3,204,072,303	-----
Generated output (kilowatt-hours), total.....	74,229,706,198	70,716,166,932	2,675,394,395	297,867	887,847,004	-----
By steam.....	1,089,018,580	396,407,934	678,331,847	5,022,303	5,040,935	-----
By internal combustion.....	45,778,706,118	38,807,074,069	1,900,094,562	759,825,279	1,950,527,814	2,361,184,364
By water power.....	-----	-----	-----	-----	-----	-----
Fuel used for electric generation: <sup>3</sup>						
Coal, anthracite (tons, 2,000 pounds).....	2,023,965	1,930,223	93,272	-----	-----	500
Coke, bituminous (tons, 2,000 pounds).....	40,468,929	37,846,269	2,127,906	-----	613	524,441
Coke (tons, 2,000 pounds).....	88,129	84,529	3,600	-----	-----	-----
Fuel oil (barrels, 52 gallons).....	13,898,978	11,275,244	2,589,794	12,779	7,000	14,161
Gas, natural (1,000 cubic feet).....	159,453,251	146,822,867	12,630,384	-----	-----	-----

<sup>1</sup> Includes statistics for privately owned concerns (manufacturing and mining companies, railways, and railroads) and publicly owned ones (United States national parks, State colleges, and certain municipal plants).

<sup>2</sup> Published totals for 1932, of all establishments reporting, are as follows:

Number of establishments, companies or systems	3,429	Number of generators	11,111
Generating all or part of current	1,788	Kilowatt capacity of generators	34,622,554
Number reporting distribution or transmission only	1,641	Generated output (kilowatt-hours)	79,637,466,661
Number of generating stations	4,339		

<sup>3</sup> Stations having more than one type of prime mover.

<sup>4</sup> Reported as idle equipment.

<sup>5</sup> In addition, the following kinds of fuel were used in electric generation: Manufactured gas, hogged fuel, and sawmill and other waste.

<sup>6</sup> Includes 2,556 barrels of gasoline.

TABLE 13.—SALES OF ELECTRIC ENERGY—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY CLASS OF SERVICE, BY REPORTING SOURCES: 1937

CLASS OF SERVICE	Number of cus- tomers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt- hours	Average kilowatt- hours per customer	Amount	Aver- age per custom- er (dol- lars)	Aver- age per kilo- watt- hour (cents)
ALL SOURCES						
Total sales.....	27,219,362	132,929,517,230	4,884	\$2,356,513,110	87	1.8
Sales to ultimate consumers, total.....	27,216,336	103,070,404,109	3,787	2,177,617,063	80	2.1
Residential or domestic sales:						
Farm.....	615,136	666,635,455	1,084	24,830,046	40	3.7
Nonfarm.....	21,589,895	16,815,223,038	779	726,362,566	34	4.3
Rural—distinct rural rates only: <sup>1</sup>						
Farm.....	538,283	680,579,766	1,822	31,139,540	58	3.2
Nonfarm.....	169,382	306,371,552	1,809	10,463,807	62	3.4
Commercial and industrial sales:						
Farm.....	61,084	1,023,511,780	16,513	15,196,765	245	1.5
Nonfarm.....	4,144,195	69,911,421,452	16,870	1,189,868,744	287	1.7
Public street and highway lighting.....	23,182	2,035,658,836	87,812	73,859,468	3,186	3.6
Other sales to public authorities.....	69,458	2,415,747,083	34,780	37,269,308	537	1.5
Sales to railroads and railways:						
Street and interurban railways.....	374	4,887,908,103	13,066,273	42,472,996	113,564	.9
Electrified steam-railroad divisions.....	102	1,558,474,349	15,279,160	14,043,062	137,677	.9
Interdepartmental.....	1,627	2,272,205,092	1,396,561	10,193,628	6,265	.4
Other sales to ultimate consumers.....	2,718	196,667,594	72,357	1,917,133	705	1.0
Sales for resale, total.....	3,026	29,859,113,130	9,867,510	178,896,056	50,120	.6
Sales to other electric utilities:						
Municipal distribution systems.....	1,110	2,416,932,109	2,204,443	18,326,460	16,510	.7
Mutual or cooperative undertakings.....	196	70,885,348	361,660	478,789	2,443	.7
Other electric companies.....	1,675	27,282,032,158	16,287,780	159,664,845	95,322	.6
Other sales for resale.....	45	59,263,515	1,316,967	425,962	9,466	.7
PRIVATELY-OWNED ELECTRIC UTILITIES						
Total sales.....	24,435,265	120,412,069,127	4,928	\$2,174,796,426	89	1.8
Sales to ultimate consumers, total.....	24,432,724	93,524,013,857	3,828	2,006,933,408	82	2.1
Residential or domestic sales:						
Farm.....	556,244	603,285,669	1,085	22,736,263	41	3.8
Nonfarm.....	10,365,677	14,921,015,856	770	654,786,938	34	4.4
Rural—distinct rural rates only: <sup>1</sup>						
Farm.....	478,011	938,650,264	1,964	29,274,048	61	3.1
Nonfarm.....	155,586	287,311,102	1,847	9,697,971	62	3.4
Commercial and industrial sales:						
Farm.....	59,127	923,615,680	15,621	14,096,245	238	1.5
Nonfarm.....	3,731,207	63,609,765,476	17,584	1,120,173,017	300	1.7
Public street and highway lighting.....	20,736	1,582,911,433	76,336	65,536,665	3,161	4.1
Other sales to public authorities.....	63,700	2,202,021,370	34,569	34,250,761	538	1.6
Sales to railroads and railways:						
Street and interurban railways.....	324	4,748,354,371	14,655,415	40,914,668	126,280	.9
Electrified steam-railroad divisions.....	74	1,392,515,497	18,817,777	12,148,314	164,166	.9
Interdepartmental.....	205	104,766,812	950,082	2,126,726	10,374	1.1
Other sales to ultimate consumers.....	1,833	119,800,327	65,358	1,182,702	645	1.0
Sales for resale, total.....	2,541	26,888,055,270	10,581,683	167,863,018	66,062	.6
Sales to other electric utilities:						
Municipal distribution systems.....	941	1,252,231,837	1,330,746	16,238,130	17,266	1.3
Mutual or cooperative undertakings.....	76	6,031,884	79,367	102,355	1,347	1.7
Other electric companies.....	1,513	26,592,878,511	16,015,320	151,316,377	100,011	.6
Other sales for resale.....	11	36,913,088	3,355,731	206,156	18,741	.6

See footnotes at end of table.

TABLE 13.—SALES OF ELECTRIC ENERGY—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY CLASS OF SERVICE, BY REPORTING SOURCES: 1937—Continued

CLASS OF SERVICE	Number of customers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt-hours	Average kilowatt-hours per customer	Amount	Average per customer (dollars)	Average per kilowatt-hour (cents)
MUNICIPALLY OWNED ELECTRIC UTILITIES						
Total sales.....	2,657,268	6,340,864,449	2,390	\$153,330,188	58	2.4
Sales to ultimate consumers, total.....	2,656,958	5,674,398,803	2,136	149,544,540	56	2.6
Residential or domestic sales:						
Farm.....	32,048	24,750,713	772	1,089,669	34	4.4
Nonfarm.....	2,174,752	1,848,260,314	850	70,071,245	32	3.8
Rural—distinct rural rates only:						
Farm.....	27,058	20,667,730	764	1,025,247	38	5.0
Nonfarm.....	12,500	15,245,761	1,220	677,347	54	4.4
Commercial and industrial sales:						
Farm.....	1,402	12,059,021	9,243	260,439	192	2.1
Nonfarm.....	390,005	3,114,248,824	7,793	64,206,755	161	2.1
Public street and highway lighting.....	2,297	270,088,885	117,583	6,974,002	3,036	2.6
Other sales to public authorities.....	5,562	168,664,500	30,324	2,731,187	491	1.6
Sales to railroads and railways:						
Street and interurban railways.....	71	44,847,948	631,661	513,214	7,228	1.1
Electrified steam-railroad divisions.....	1,205	141,614,685	117,523	1,829,022	1,518	1.3
Interdepartmental.....	458	13,050,422	28,494	157,413	344	1.2
Other sales to ultimate consumers.....						
Sales for resale, total.....	310	675,465,648	2,178,921	3,785,648	12,212	.6
Sales to other electric utilities:						
Municipal distribution systems.....	113	20,924,726	185,175	355,966	3,150	1.7
Mutual or cooperative undertakings.....	82	34,763,045	423,940	175,164	2,136	.5
Other electric companies.....	88	600,974,800	6,820,259	3,067,634	34,859	.5
Other sales for resale.....	27	18,803,075	696,410	186,884	6,922	1.0
COOPERATIVES, POWER DISTRICTS, ETC.						
Total sales.....	86,320	897,295,356	10,395	\$8,003,417	93	.9
Sales to ultimate consumers, total.....	86,298	438,687,404	5,083	5,673,915	66	1.3
Residential or domestic sales:						
Farm.....	25,276	37,160,383	1,470	966,501	38	2.6
Nonfarm.....	18,383	17,189,409	935	473,531	26	2.8
Rural—distinct rural rates only:						
Farm.....	30,471	19,425,235	637	770,969	25	4.0
Nonfarm.....	1,263	1,001,422	864	41,778	33	3.8
Commercial and industrial sales:						
Farm.....	1,137	86,729,134	76,279	822,237	723	.9
Nonfarm.....	9,377	224,517,835	23,943	2,019,752	215	.9
Public street and highway lighting.....	102	2,191,502	21,486	38,654	379	1.8
Other sales to public authorities.....	169	4,673,882	27,056	67,160	397	1.4
Interdepartmental.....	2,120	45,708,542	380,905	473,253	3,944	1.0
Other sales to ultimate consumers.....						
Sales for resale, total.....	22	458,607,952	20,845,816	2,320,492	105,886	.5
Sales to other electric utilities:						
Municipal distribution systems <sup>3</sup> .....	9	12,603,580	1,410,390	123,893	13,766	1.0
Other electric companies.....	131	445,914,392	34,301,107	2,205,590	160,661	.5

See footnotes at end of table.

TABLE 13.—SALES OF ELECTRIC ENERGY—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY CLASS OF SERVICE, BY REPORTING SOURCES: 1937—Continued

CLASS OF SERVICE	Number of customers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt-hours	Average kilowatt-hours per customer	Amount	Average per customer (\$ dollars)	Average per kilowatt-hour (cents)
FEDERAL AND STATE						
Total sales.....	8,573	1,868,492,755	217,951	\$4,271,438	498	0.2
Sales to ultimate consumers, total.....	8,473	435,935,930	51,450	1,659,669	196	.4
Residential or domestic sales:						
Farm.....	1,321	1,287,742	975	30,337	23	2.4
Nonfarm.....	3,088	6,179,389	2,001	118,849	38	1.9
Rural—distinct rural rates only: <sup>1</sup>						
Farm.....	2,049	4,625,620	1,517	120,643	40	2.6
Nonfarm.....	966	208,053,148	215,376	728,370	754	.4
Commercial and industrial sales:						
Farm.....	3	23,609	7,870	1,220	407	5.2
Nonfarm.....	7	1,824,775	260,682	12,448	1,778	.7
Public street and highway lighting.....	28	182,827,191	6,529,543	526,294	18,795	.3
Other sales to public authorities.....	11	31,114,456	2,828,587	121,538	11,049	.4
Interdepartmental.....						
Other sales to ultimate consumers.....						
Sales for resale, total.....	100	1,432,550,825	14,325,568	2,611,769	26,118	.2
Sales to other electric utilities:						
Municipal distribution systems.....	40	1,163,081,087	29,077,050	1,586,743	39,669	.1
Mutual or cooperative undertakings.....	38	30,090,419	791,853	201,270	5,297	.7
Other electric companies.....	22	239,384,419	10,881,110	823,756	37,443	.3
OTHER SOURCES <sup>4</sup>						
Total sales.....	31,936	3,401,795,552	106,519	\$16,111,650	504	0.5
Sales to ultimate consumers, total.....	31,883	2,997,368,115	94,011	13,805,521	433	.5
Residential or domestic sales:						
Farm.....	247	150,948	611	7,186	29	4.8
Nonfarm.....	27,905	22,578,070	807	912,003	33	4.0
Rural—distinct rural rates only: <sup>1</sup>						
Farm.....	245	142,138	3,159	4,188	93	2.9
Nonfarm.....	3,040	754,836,169	248,301	2,740,850	902	.4
Commercial and industrial sales:						
Farm.....	44	180,443,347	4,100,985	1,308,927	29,748	.7
Nonfarm.....	20	38,562,556	1,928,128	198,752	9,938	.5
Public street and highway lighting.....						
Other sales to public authorities.....						
Sales to railroads and railways:						
Street and interurban railways.....	27	260,664,636	37,237,805	2,039,862	119,980	1.1
Electrified steam-railroad divisions.....						
Interdepartmental.....						
Other sales to ultimate consumers.....						
Sales for resale, total.....	53	404,427,437	7,630,706	2,306,129	43,512	.6
Sales to other electric utilities:						
Municipal distribution systems <sup>3</sup> .....	14	1,547,401	110,529	54,650	3,904	3.5
Other electric companies.....	30	402,880,036	10,330,257	2,251,479	57,730	.6

<sup>1</sup>This classification covers rural sales as outlined by the "Uniform system of accounts" prescribed by the Federal Power Commission for use of public utilities and licensees under its jurisdiction, as Account No. 601. It was not extensively used, however, by reporting establishments in all geographic divisions. The type of service represents commercial sales principally, although it is probable the figures include some residential or domestic sales.

<sup>2</sup>Combined to avoid disclosure of individual operations.

<sup>3</sup>Includes "Other sales for resale."

<sup>4</sup>Includes statistics for privately owned concerns (manufacturing and mining companies, railways and railroads) and publicly owned ones (United States national parks, State colleges, and certain municipal plants), whose sales of electric energy are incidental to their other operations.

TABLE 14.—EMPLOYEES AND SALARIES AND WAGES PAID, BY REPORTING SOURCES: 1937

	All sources	Privately owned electric utilities	Municipally owned electric utilities	Cooperatives, power districts, etc.	Federal and State	Other sources <sup>1</sup>
Employees:						
Number on June 30, 1937.....	281,335	255,155	22,887	600	741	1,862
Number on Dec. 31, 1937.....	276,834	251,171	22,320	700	786	1,797
Salaries and wages for year.....	\$470,353,487	\$132,059,746	\$32,654,464	\$877,544	\$1,146,904	\$3,014,709
Salaried employees: <sup>2</sup>						
Number on June 30, 1937.....	123,565	113,387	9,395	263	201	319
Number on Dec. 31, 1937.....	123,022	112,928	9,257	204	211	322
Salaries.....	\$221,556,587	\$207,049,652	\$13,135,151	\$354,579	\$262,786	\$754,449
Wage earners:						
Number on June 30, 1937.....	157,770	141,768	13,402	427	540	1,543
Number on Dec. 31, 1937.....	153,812	138,233	13,063	466	575	1,475
Wages.....	\$248,796,900	\$225,610,094	\$19,519,313	\$522,965	\$834,208	\$2,200,320

<sup>1</sup> Includes statistics for privately owned concerns (manufacturing and mining companies, railways and railroads) and publicly owned ones (United States national parks, State colleges, and certain municipal plants) whose sales of electric energy are incidental to their other operations.

<sup>2</sup> Includes superintendents, managers, clerks, stenographers, and supervisory and office employees.

TABLE 15.—SUMMARY, BY PURELY ELECTRIC AND COMPOSITE ESTABLISHMENTS, BY REPORTING SOURCES: 1937

ITEM AND SOURCE	Total	Purely electric	Composite
Number of reporting establishments, companies, or systems, total.....	3,501	2,624	877
Privately owned electric utilities.....	1,340	872	468
Municipally owned electric utilities.....	1,860	1,464	396
Cooperatives, power districts, etc.....	181	176	5
Federal and State.....	25	25	
Other sources <sup>1</sup> .....	95	87	8
Value of electric utility plant, total.....	\$12,940,993,328	\$4,175,509,700	\$8,765,483,619
Privately owned electric utilities.....	11,936,205,264	3,295,549,844	8,640,655,420
Municipally owned electric utilities.....	701,670,820	585,788,550	115,882,261
Cooperatives, power districts, etc.....	50,783,341	49,669,484	1,113,837
Federal and State.....	145,130,674	145,136,674	
Other sources <sup>1</sup> .....	107,197,229	99,365,148	7,832,081
Operating revenues (electric), total <sup>2</sup> .....	\$2,390,856,709	\$778,785,664	\$1,612,071,045
Privately owned electric utilities.....	2,207,108,652	631,484,733	1,575,623,919
Municipally owned electric utilities.....	154,976,216	120,184,088	34,792,128
Cooperatives, power districts, etc.....	8,190,273	7,694,763	495,510
Federal and State.....	4,293,398	4,293,398	
Other sources <sup>1</sup> .....	16,288,170	15,128,682	1,159,488
Operating expenses (electric), total <sup>3</sup> .....	\$1,042,192,680	\$356,460,064	\$685,732,616
Privately owned electric utilities.....	946,416,262	280,061,016	660,355,246
Municipally owned electric utilities.....	80,131,176	61,395,151	18,736,025
Cooperatives, power districts, etc.....	4,281,351	4,107,258	84,093
Federal and State.....	1,646,567	1,646,567	
Other sources <sup>1</sup> .....	9,717,324	9,160,072	557,252
Total employees:			
Number on June 30, 1937.....	281,335	93,722	187,613
Number on Dec. 31, 1937.....	276,834	91,389	185,445
Privately owned electric utilities.....			
Number on June 30, 1937.....	255,155	72,664	182,491
Number on Dec. 31, 1937.....	251,171	70,766	180,405
Municipally owned electric utilities.....			
Number on June 30, 1937.....	22,887	17,978	4,909
Number on Dec. 31, 1937.....	22,320	17,484	4,836
Cooperatives, power districts, etc.—			
Number on June 30, 1937.....	690	664	26
Number on Dec. 31, 1937.....	700	734	26
Federal and State—			
Number on June 30, 1937.....	741	741	
Number on Dec. 31, 1937.....	786	786	
Other sources <sup>1</sup> —			
Number on June 30, 1937.....	1,862	1,675	187
Number on Dec. 31, 1937.....	1,797	1,619	178

See footnotes at end of table.

TABLE 15.—SUMMARY, BY PURELY ELECTRIC AND COMPOSITE ESTABLISHMENTS,  
BY REPORTING SOURCES: 1937—Continued

ITEM AND SOURCE	Total	Purely electric	Composite
Salaries and wages for year, total	\$470,353,487	\$158,022,050	\$312,331,428
Privately owned electric utilities	432,659,746	126,840,677	305,819,069
Municipally owned electric utilities	32,654,464	26,444,005	6,210,459
Cooperatives, power districts, etc.	877,544	842,043	35,501
Federal and State	1,146,964	1,146,964	-----
Other sources <sup>1</sup>	3,014,769	2,748,370	266,399
Prime movers, total:			
Number	10,824	4,472	6,352
Horsepower	50,220,081	18,778,632	31,441,449
Privately owned electric utilities—			
Number	7,636	2,090	5,546
Horsepower	44,285,739	13,507,665	30,688,174
Municipally owned electric utilities—			
Number	2,762	1,998	764
Horsepower	3,454,616	2,775,790	678,826
Cooperatives, power districts, etc.—			
Number	66	58	8
Horsepower	228,974	215,657	13,317
Federal and State—			
Number	72	72	-----
Horsepower	1,178,318	1,178,318	-----
Other sources <sup>1</sup> —			
Number	288	254	34
Horsepower	1,072,434	1,011,302	61,132
Kilowatt capacity of generators, total	36,481,107	13,651,121	22,829,986
Privately owned electric utilities	32,192,918	9,903,460	22,289,458
Municipally owned electric utilities	2,499,347	2,013,278	486,069
Cooperatives, power districts, etc.	147,224	137,374	9,850
Federal and State	859,046	859,046	-----
Other sources <sup>1</sup>	782,572	737,963	44,609
Source of energy (kilowatt-hours), total:			
Generated	121,097,430,896	46,533,883,374	74,563,547,522
Energy purchased or received from other sources	47,202,225,985	19,595,192,020	27,607,033,985
Privately owned electric utilities—			
Generated	109,919,648,965	36,657,235,177	73,262,413,788
Energy received from other sources	42,416,804,041	15,248,126,998	27,168,677,043
Municipally owned electric utilities—			
Generated	5,253,820,804	4,304,354,863	949,465,941
Energy received from other sources	3,395,971,084	2,969,447,524	426,522,500
Cooperatives, power districts, etc.—			
Generated	765,847,582	646,099,362	119,748,220
Energy received from other sources	248,069,217	246,434,801	1,634,416
Federal and State—			
Generated	1,954,041,242	1,954,041,242	-----
Energy received from other sources	280,804,618	280,804,618	-----
Other sources <sup>1</sup> —			
Generated	3,204,072,303	2,972,152,730	231,919,573
Energy received from other sources	860,577,025	850,378,079	10,198,946
Sales of electric energy, total:			
Number of customers	27,219,362	8,656,738	18,562,624
Kilowatt-hours	132,929,517,239	53,521,437,648	79,408,079,591
Revenue	\$2,356,513,119	\$766,554,705	\$1,589,958,414
Privately owned electric utilities—			
Number of customers	24,435,265	6,465,701	17,969,564
Kilowatt-hours	120,412,069,127	42,476,490,947	77,935,578,180
Revenue	\$2,174,796,426	\$620,736,146	\$1,554,060,280
Municipally owned electric utilities—			
Number of customers	2,657,268	2,089,856	587,412
Kilowatt-hours	6,349,864,419	5,226,816,400	1,123,018,049
Revenue	\$153,330,188	\$113,080,020	\$34,250,168
Cooperatives, power districts, etc.—			
Number of customers	86,320	84,912	1,408
Kilowatt-hours	897,295,356	781,733,376	115,561,980
Revenue	\$8,003,417	\$7,508,598	\$494,819
Federal and State—			
Number of customers	8,573	8,573	-----
Kilowatt-hours	1,868,492,755	1,888,492,755	-----
Revenue	\$4,271,438	\$4,271,438	-----
Other sources <sup>1</sup> —			
Number of customers	31,936	27,696	4,240
Kilowatt-hours	3,401,795,552	3,167,904,170	233,891,382
Revenue	\$16,111,650	\$14,958,503	\$1,153,147

<sup>1</sup> Includes statistics for privately owned concerns (manufacturing and mining companies, railways and railroads) and publicly owned ones (United States national parks, State colleges, and certain municipal plants), whose sales of electric energy are incidental to their other operations.

<sup>2</sup> Includes revenue from sales of electric energy and other electric revenue.

<sup>3</sup> Includes cost of fuel, purchased and interchanged power, maintenance, and other operating expenses.

### **Chapter III.—THE GEOGRAPHICAL DISTRIBUTION OF THE INDUSTRY**

This chapter is primarily concerned with the presentation of summary statistics for the entire industry by geographic divisions. Certain tables, however, include statistics by States.

**State statistics.**—In former census years the statistics for the entire industry were presented by States, as well as by geographic divisions. Unfortunately, the introduction of the new system of classification by reporting sources, as cited in chapter II, has made it impossible to continue the presentation by States, for all establishments reporting, and, at the same time, present State statistics for privately owned and municipally owned electric utilities, without disclosing the operations of establishments not classified in the "Privately owned electric utilities" and "Municipally owned electric utilities" groups. In numerous States, only a few establishments were classified outside these two groups, and if State figures for all establishments reporting had been published for certain items, it would have been possible to ascertain, exactly or approximately, the operations of such establishments, by merely subtracting the sum of the published figures for privately owned and municipally owned electric utilities from the totals for all establishments reporting. It was, therefore, decided to withhold State statistics for the industry as a whole, in certain tables, in order to present statistics by States for privately owned and municipally owned electric utilities, since it was thought that separate State statistics for these two groups would be of greater general value. Attention is called to chapter V, which presents detailed statistics for privately owned and municipally owned utilities.

**Financial statistics.**—Certain items of the schedule did not call for a separation of the reporting companies' operations by States. For this reason, this chapter does not include statistics for the balance sheet, income statement and dividend appropriations, number of salaried employees and wage earners, and salaries and wages paid.

Table 16 presents summary statistics for generating facilities, generated output, and fuel consumed in electric generation, while table 19 shows sales of electric energy (number of customers, kilowatt-hours sold, and revenue for electric service), by major classes of service. The other tables give detailed statistics on the major items of the industry as covered by the survey.

TABLE 16.—GENERATING FACILITIES, GENERATED OUTPUT, AND FUEL CONSUMED, ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS: 1937

	GEOGRAPHIC DIVISIONS <sup>1</sup>									
	UNITED STATES	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Number of reporting establishments, companies, or systems, total	3,501	270	249	663	994	393	155	255	355	187
Number generating all or part of current	1,812	130	112	309	511	162	83	195	214	96
Number reporting distribution or transmission only	1,689	140	137	354	483	231	72	60	121	91
Number of generating stations	4,027	328	382	643	863	419	219	461	411	301
Steam										
Internal-combustion	1,112	56	137	258	221	125	87	108	70	50
Water	1,253	14	23	75	482	114	92	318	152	33
Composite	1,426	234	206	276	114	163	37	24	168	204
206	24	16	34	46	17	3	11	41	41	14
Generators by type of prime mover:										
Total number	10,721	846	1,155	8,289	1,843	2,238	1,179	549	1,181	1,035
Total kilowatt capacity	36,451,07	2,752,721	8,383,327	8,069	2,728,008	4,447,380	1,857,809	1,701,336	1,662,650	4,113,307
Steam engines										
Number	861	29	74	219	234	81	69	66	75	14
Kilowatt capacity	520,629	9,341	98,233	207,330	76,867	20,022	71,589	15,771	16,308	4,846
Steam turbines	2,725	214	426	635	744	300	159	257	129	119
Number	24,599,706	1,814,672	7,196,461	7,324,545	1,953,874	2,344,239	656,055	1,503,836	405,049	1,400,975
Kilowatt capacity										
Internal-combustion										
Number	3,490	51	106	253	1,247	304	210	813	409	94
Kilowatt capacity	762,010	12,206	33,160	62,349	258,720	67,148	28,174	170,109	79,373	50,771
Hydroturbines and water wheels										
Number	3,645	549	547	736	283	494	111	45	412	468
Kilowatt capacity	10,508,462	916,502	1,510,453	694,845	438,547	2,015,871	1,101,901	101,620	1,161,920	2,656,713
Generated output (kilowatt-hours), total	121,037,430,896	7,577,025,366,29,776,425,143,28,	592,109,255	7,554,600,130	15,080,259,531	5,385,479	371	6,463,696,022	5,781,982	500,14,085,853,574
By steam	74,223,706,198	4,154,116,919,21,420,018,000	25,834,286,471,5,272,869	976	6,726,429,803	1,560,258	667	5,998,987	850	1,262,538,085
By internal-combustion	20,414,726	42,717,501	101,306,457	415,971	78,227,282	34,080,702	215,018,607	215,115,998	222	61,373,337
By water power	45,778,706,18	3,402,493,591	8,316,659,342,2,656,546,331,1	865,785,708	8,275,602,446,3,901,1,801,602	248,789,505,4	400,446,193,12	624,309,840	193	12,624,309,840

Fuel used for electric generation: <sup>1</sup>								
Coal, anthracite (tons, 2,000 pounds)	2,023,965	500	1,868,161		18,748	20,366	64,094	44,223
Coal, bituminous (tons, 2,000 pounds)	40,468,929	2,119,741	11,111,199	17,814,892	3,491,816	3,546,456	1,221,654	257,090
Coke (tons, 2,000 pounds)	4,83,129							
Fuel oil (barrels, 42 gallons)	4,13,918,978	3,058,163	3,261,223	266,905	1,208,338	2,676,587	164,786	712,801
Gas, natural (1,000 cubic feet)	1,59,453,251	3,124,766	13,224,111	32,149,389	3,665,312	6,288,943	78,234,149	6,506,248

<sup>1</sup> See footnote 1, table 10.<sup>2</sup> Stations having more than 1 type of prime mover.<sup>3</sup> In addition, the following kinds of fuel were used in electric generation: Manufactured gas, hogged fuel, and sawmill and other waste.

<sup>4</sup> Not shown by geographic divisions to avoid disclosure of individual establishments.  
<sup>5</sup> Includes 2,566 barrels of gasoline.

TABLE 17.—GENERATOR CAPACITY AND CURRENT GENERATED, ALL ESTABLISHMENTS, BY DIVISIONS AND STATES: 1937 AND 1932

DIVISION AND STATE	RATED GENERATOR CAPACITY (kilowatts)			CURRENT GENERATED (kilowatt-hours)		
	1937	1932	Percent increase or de- crease (-)	1937		Percent in- crease
				1937	1932	
UNITED STATES.....	36,481,107	34,622,554	5.4	121,097,430,896	79,657,466,651	52.0
<b>GEOGRAPHIC DIVISIONS:</b>						
New England.....	2,752,721	2,639,387	4.3	7,577,025,366	5,330,233,841	42.2
Middle Atlantic.....	8,838,327	8,271,328	6.9	20,776,425,143	20,340,794,839	46.4
East North Central.....	8,289,069	8,246,758	.5	28,592,109,250	18,106,043,295	57.9
West North Central.....	2,728,008	2,615,095	4.3	7,554,600,130	5,357,886,802	41.0
South Atlantic.....	4,447,880	4,290,917	3.7	15,080,250,531	9,458,694,089	59.4
East South Central.....	1,857,879	1,480,254	25.5	5,585,479,371	2,993,770,460	86.6
West South Central.....	1,791,336	1,792,286	-.1	6,463,666,022	4,308,490,556	50.0
Mountain.....	1,662,650	1,157,200	43.7	5,781,982,500	2,346,832,279	146.4
Pacific.....	4,113,307	4,129,329	-.4	14,685,853,574	11,414,720,430	28.7
NEW ENGLAND:						
Maine.....	259,857	265,153	-2.0	1,032,910,202	762,111,856	35.5
New Hampshire.....	298,921	283,321	5.5	760,114,088	680,606,529	11.7
Vermont and Rhode Island <sup>1</sup> .....	404,651	432,093	-6.4	1,293,178,803	811,459,260	59.4
Massachusetts.....	1,210,319	1,156,134	4.7	2,852,087,311	2,158,485,603	32.1
Connecticut.....	578,973	502,686	15.2	1,638,734,902	917,570,593	78.6
MIDDLE ATLANTIC:						
New York.....	4,837,375	4,577,631	5.7	15,582,897,247	10,976,563,667	42.0
New Jersey.....	1,066,890	1,062,445	.4	3,707,988,218	2,990,678,924	24.0
Pennsylvania.....	2,934,062	2,631,252	11.5	10,485,539,678	6,373,552,248	64.5
EAST NORTH CENTRAL:						
Ohio.....	2,179,100	2,145,614	1.6	8,070,468,170	4,868,953,749	65.8
Indiana.....	1,038,397	987,882	5.1	3,736,887,519	2,422,939,907	54.2
Illinois.....	2,396,977	2,605,826	-8.0	8,059,574,202	5,446,742,903	48.0
Michigan.....	1,754,288	1,657,436	5.8	6,028,307,730	3,532,622,960	70.6
Wisconsin.....	920,307	850,000	8.3	2,696,871,578	1,834,783,776	47.0
WEST NORTH CENTRAL:						
Minnesota.....	516,245	477,220	8.2	1,480,700,417	995,182,260	48.8
Iowa.....	607,748	600,369	1.2	1,887,399,347	1,483,096,406	27.3
Missouri.....	765,771	716,502	6.9	1,570,848,171	1,214,488,146	54.0
North Dakota.....	73,177	70,400	3.9	200,840,952	140,315,562	43.1
South Dakota.....	76,573	66,920	14.4	144,810,035	87,402,102	65.7
Nebraska.....	269,611	252,186	6.9	703,907,133	561,795,147	25.3
Kansas.....	418,883	431,489	-2.9	1,266,094,075	875,607,249	44.6
SOUTH ATLANTIC:						
Delaware, Maryland, District of Columbia, and West Virginia <sup>1</sup> .....	1,483,756	1,395,892	6.3	5,799,391,487	3,674,059,524	57.8
Virginia.....	439,167	409,468	7.3	1,638,742,805	962,317,683	70.3
North Carolina.....	992,327	1,004,687	-1.2	3,215,857,638	1,651,234,533	94.8
South Carolina.....	675,721	642,856	5.1	1,752,429,717	1,294,883,416	35.3
Georgia.....	483,792	474,962	1.9	1,758,630,581	1,269,290,375	38.6
Florida.....	373,117	363,052	2.8	915,207,303	606,908,558	50.8
EAST SOUTH CENTRAL:						
Kentucky.....	343,068	339,771	1.0	894,607,801	681,946,841	31.2
Tennessee.....	526,380	425,541	23.7	1,841,302,173	1,050,404,625	75.3
Alabama.....	922,996	649,273	42.2	2,771,901,772	1,209,646,423	129.1
Mississippi.....	65,365	65,669	-.5	77,667,625	51,772,571	60.0
WEST SOUTH CENTRAL:						
Arkansas.....	161,336	152,808	5.6	279,107,212	155,019,698	80.0
Louisiana.....	327,815	328,624	-.2	1,730,855,751	1,171,951,428	47.7
Oklahoma.....	336,246	343,210	-2.0	1,107,540,981	725,488,247	52.7
Texas.....	965,839	967,644	-.2	3,346,183,078	2,250,031,183	48.3
MOUNTAIN:						
Montana and Utah <sup>1</sup> .....	437,984	455,512	-3.8	1,839,001,047	911,366,218	101.8
Idaho.....	260,025	208,007	25.0	973,594,978	473,289,670	105.7
Wyoming.....	63,126	36,272	74.0	161,596,192	74,596,866	116.6
Colorado.....	227,824	221,246	3.0	681,741,410	437,329,881	55.9
New Mexico and Arizona <sup>1</sup> .....	305,626	223,085	37.0	903,529,669	412,616,126	119.0
Nevada.....	368,065	13,078	2,714.4	1,222,518,604	37,633,518	3,148.5
PACIFIC:						
Washington.....	1,005,959	882,541	14.0	3,693,204,079	2,544,766,928	45.1
Oregon.....	371,131	382,429	-3.0	1,393,361,394	968,614,120	43.9
California.....	2,734,217	2,864,359	-4.5	9,599,288,101	7,901,339,382	21.5

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 18.—PRIME MOVERS—NUMBER AND HORSEPOWER, BY TYPE, ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS: 1937

DIVISION	TOTAL		STEAM ENGINES		STEAM TURBINES	
	Number	Rated horse-power	Number	Rated horse-power	Number	Rated horse-power
UNITED STATES.....	10,824	50,220,081	854	711,987	2,727	33,177,336
GEOGRAPHIC DIVISIONS: <sup>1</sup>						
New England.....	855	3,769,421	30	13,285	214	2,411,362
Middle Atlantic.....	1,152	12,099,907	71	127,879	426	9,750,828
East North Central.....	1,935	11,188,536	218	281,448	639	9,806,219
West North Central.....	2,237	3,711,181	231	108,141	474	2,628,708
South Atlantic.....	1,177	6,282,509	82	28,998	299	3,185,396
East South Central.....	545	2,536,271	69	99,550	159	884,681
West South Central.....	1,188	2,451,287	66	21,483	258	2,042,474
Mountain.....	1,035	2,426,455	74	24,597	139	552,964
Pacific.....	700	5,754,514	13	7,106	119	1,914,714

  

DIVISION	INTERNAL-COMBUSTION ENGINES				HYDROTURBINES AND WATER WHEELS	
	Diesel and semi-Diesel		Other internal-combustion engines		Number	Rated horse-power
	Number	Rated horse-power	Number	Rated horse-power		
UNITED STATES.....	3,083	1,001,691	412	98,870	3,748	15,230,197
GEOGRAPHIC DIVISIONS: <sup>1</sup>						
New England.....	49	17,298	5	595	557	1,326,881
Middle Atlantic.....	68	41,214	38	6,937	549	2,173,549
East North Central.....	212	81,766	40	9,216	826	1,009,887
West North Central.....	1,154	347,073	92	23,739	286	603,520
South Atlantic.....	284	90,870	22	6,392	490	2,970,553
East South Central.....	180	37,676	28	3,679	109	1,510,685
West South Central.....	715	218,935	103	25,528	46	142,867
Mountain.....	333	94,365	76	22,251	413	1,732,288
Pacific.....	88	72,494	8	533	472	3,750,667

<sup>1</sup> See footnote 1, table 19.

TABLE 19.—SALES OF ELECTRIC ENERGY, BY MAJOR CLASSES OF SERVICE,  
ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS:<sup>1</sup> 1937

CLASS OF SERVICE	Number of cus- tomers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt- hours	Average kilowatt- hours per customer	Amount	Aver- age per cus- tomer (dollars)	Aver- age per kilo- watt- hour (cents)
UNITED STATES						
Total sales	27,210,362	132,929,517,239	4,884	\$2,356,513,119	87	1.8
Sales to ultimate consumers, total <sup>2</sup>	27,216,336	103,070,404,100	3,787	2,177,617,063	80	2.1
Residential or domestic sales:						
Farm	615,136	666,635,455	1,084	24,830,046	40	3.7
Nonfarm	21,589,895	16,815,223,038	779	726,362,566	34	4.3
Commercial and industrial sales: <sup>3</sup>						
Farm	600,267	2,004,091,555	3,339	46,336,305	77	2.3
Nonfarm	4,313,577	70,217,793,004	16,278	1,200,332,551	278	1.7
Public street and highway lighting	23,182	2,035,658,836	87,812	73,859,468	3,186	3.6
Sales for resale, total <sup>4</sup>	3,026	29,859,113,130	-----	178,896,056	-----	.6
Sales to other electric utilities:						
Municipal distribution sys- tems	1,110	2,446,932,109	-----	18,326,460	-----	.7
Other electric companies	1,675	27,282,032,158	-----	159,664,845	-----	.6
NEW ENGLAND						
Total sales	2,410,789	10,207,611,608	4,234	\$207,203,132	86	2.0
Sales to ultimate consumers, total <sup>2</sup>	2,410,432	6,271,055,019	2,602	174,582,545	72	2.8
Residential or domestic sales:						
Farm	56,375	54,217,913	962	2,572,071	46	4.7
Nonfarm	1,987,956	1,315,440,038	662	66,927,674	34	5.1
Commercial and industrial sales: <sup>3</sup>						
Farm	4,429	8,323,294	1,879	367,962	83	4.4
Nonfarm	354,753	4,521,028,804	12,744	92,664,387	261	2.0
Public street and highway light- ing	1,766	184,685,305	104,578	9,187,060	5,202	5.0
Sales for resale, total <sup>4</sup>	357	3,936,556,589	-----	32,620,587	-----	.8
Sales to other electric utilities:						
Municipal distribution sys- tems	75	192,851,250	-----	2,524,497	-----	1.3
Other electric companies	276	3,741,428,647	-----	30,061,412	-----	.8
MIDDLE ATLANTIC						
Total sales	7,355,096	32,253,987,438	4,385	\$635,995,098	86	2.0
Sales to ultimate consumers, total <sup>2</sup>	7,354,767	27,610,882,806	3,754	612,638,268	83	2.2
Residential or domestic sales:						
Farm	92,588	99,014,089	1,070	4,156,208	45	4.2
Nonfarm	5,986,080	4,131,826,528	690	203,837,736	34	4.9
Commercial and industrial sales: <sup>3</sup>						
Farm	87,670	150,818,145	1,720	5,592,335	64	3.7
Nonfarm	1,175,061	19,253,472,319	16,385	340,514,895	290	1.8
Public street and highway light- ing	4,068	535,226,446	130,607	23,917,459	5,836	4.5
Sales for resale, total <sup>4</sup>	320	4,643,104,632	-----	23,356,830	-----	.5
Sales to other electric utilities:						
Municipal distribution sys- tems	74	105,331,196	-----	1,424,870	-----	1.4
Other electric companies	240	4,529,303,936	-----	21,885,508	-----	.5

See footnotes at end of table.

TABLE 19.—SALES OF ELECTRIC ENERGY, BY MAJOR CLASSES OF SERVICE,  
ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS:<sup>1</sup> 1937—Continued

CLASS OF SERVICE	Number of cus- tomers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt- hours	Average kilowatt- hours per customer	Amount	Aver- age per cus- tomer (dollars)	Aver- age per kilo- watt- hour (cents)
EAST NORTH CENTRAL						
Total sales.....	6,444,437	32,732,713,167	5,079	\$560,513,436	87	1.7
Sales to ultimate consumers, total <sup>2</sup> .....	6,443,860	23,910,846,213	3,711	507,288,365	79	2.1
Residential or domestic sales:						
Farm.....	143,723	127,408,542	886	4,924,532	34	3.9
Nonfarm.....	5,189,420	4,182,472,463	806	167,550,845	32	4.0
Commercial and industrial sales: <sup>3</sup>						
Farm.....	209,268	206,088,886	985	9,753,500	47	4.7
Nonfarm.....	881,630	16,407,520,267	18,604	285,295,841	323	1.7
Public street and highway lighting.....	4,861	546,006,451	112,324	14,458,542	2,974	2.6
Sales for resale, total <sup>4</sup> .....	577	8,821,866,954	-----	53,225,071	-----	.6
Sales to other electric utilities:						
Municipal distribution sys- tems.....	226	270,140,979	-----	3,888,886	-----	1.4
Other electric companies.....	306	8,539,970,870	-----	49,156,912	-----	.6
WEST NORTH CENTRAL						
Total sales.....	2,588,245	8,089,259,477	3,125	\$192,347,227	74	2.4
Sales to ultimate consumers, total <sup>2</sup> .....	2,587,522	8,784,357,330	2,622	179,573,740	69	2.6
Residential or domestic sales:						
Farm.....	16,167	13,206,041	817	587,303	36	4.4
Nonfarm.....	2,024,699	1,566,966,204	774	68,448,654	34	4.4
Commercial and industrial sales: <sup>3</sup>						
Farm.....	76,661	71,176,206	928	4,268,645	56	6.0
Nonfarm.....	480,371	4,407,592,185	9,574	93,318,955	203	2.1
Public street and highway lighting.....	3,823	177,089,135	46,322	6,279,730	1,643	3.5
Sales for resale, total <sup>4</sup> .....	723	1,304,902,147	-----	12,773,487	-----	1.0
Sales to other electric utilities:						
Municipal distribution sys- tems.....	372	125,870,616	-----	2,642,296	-----	2.1
Other electric companies.....	292	1,175,670,869	-----	10,054,339	-----	.9
SOUTH ATLANTIC						
Total sales.....	2,264,384	15,631,550,060	6,903	\$233,859,243	103	1.5
Sales to ultimate consumers, total <sup>2</sup> .....	2,264,022	11,815,971,807	5,210	212,622,294	94	1.8
Residential or domestic sales:						
Farm.....	80,589	63,239,930	785	2,804,095	35	4.4
Nonfarm.....	1,753,390	1,592,533,059	908	64,488,587	37	4.0
Commercial and industrial sales: <sup>3</sup>						
Farm.....	35,224	46,202,423	1,312	1,772,574	50	3.8
Nonfarm.....	387,056	8,693,349,185	22,460	127,992,009	331	1.5
Public street and highway lighting.....	1,808	150,184,334	83,067	6,431,343	3,557	4.3
Sales for resale, total <sup>4</sup> .....	362	3,815,578,253	-----	21,236,949	-----	.6
Sales to other electric utilities:						
Municipal distribution sys- tems.....	175	291,564,598	-----	3,243,692	-----	1.1
Other electric companies.....	145	3,512,532,512	-----	17,860,479	-----	.5

See footnotes at end of table.

TABLE 19.—SALES OF ELECTRIC ENERGY, BY MAJOR CLASSES OF SERVICE,  
ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS:<sup>1</sup> 1937—Continued

CLASS OF SERVICE	Number of cus- tomers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt- hours	Average kilowatt- hours per customer	Amount	Aver- age per cus- tomer (dollars)	Aver- age per kilo- watt- hour (cents)
EAST SOUTH CENTRAL						
Total sales.....	985,691	6,883,011,157	6,983	\$91,662,639	93	1.3
Sales to ultimate consumers, total <sup>2</sup> .....	985,542	5,477,536,624	5,558	84,045,044	85	1.5
Residential or domestic sales:						
Farm.....	25,044	22,487,198	898	720,471	29	3.2
Nonfarm.....	746,955	673,388,981	902	24,704,593	33	3.7
Commercial and industrial sales: <sup>3</sup>						
Farm.....	35,516	38,038,135	1,071	1,583,443	45	4.2
Nonfarm.....	172,447	3,330,972,043	19,316	48,569,314	282	1.5
Public street and highway lighting.....	1,251	66,676,388	53,298	2,487,423	1,988	3.7
Sales for resale, total <sup>4</sup> .....	149	1,405,474,533	-----	7,617,595	-----	.5
Sales to other electric utilities:						
Municipal distribution sys- tems.....	38	86,846,791	-----	673,036	-----	.8
Other electric companies.....	90	1,271,275,020	-----	6,728,560	-----	.5
WEST SOUTH CENTRAL						
Total sales.....	1,564,795	6,599,784,311	4,218	\$134,650,526	86	2.0
Sales to ultimate consumers, total <sup>2</sup> .....	1,564,615	5,264,170,828	3,365	126,075,532	81	2.4
Residential or domestic sales:						
Farm.....	11,091	13,997,065	1,262	507,118	46	3.6
Nonfarm.....	1,208,023	858,967,561	711	43,550,041	36	5.1
Commercial and industrial sales: <sup>3</sup>						
Farm.....	32,962	84,031,679	2,549	2,563,042	78	3.1
Nonfarm.....	301,488	3,858,542,965	12,798	72,148,100	239	1.9
Public street and highway light- ing.....	1,572	81,806,316	52,040	2,409,974	1,533	2.9
Sales for resale, total <sup>4</sup> .....	180	1,335,613,485	-----	8,574,944	-----	.6
Sales to other electric utilities:						
Municipal distribution sys- tems.....	41	26,527,461	-----	385,611	-----	1.5
Other electric companies.....	135	1,308,844,199	-----	8,177,406	-----	.6
MOUNTAIN						
Total sales.....	769,704	6,276,690,283	8,155	\$78,871,334	102	1.3
Sales to ultimate consumers, total <sup>2</sup> .....	769,504	4,160,514,229	5,407	72,267,894	94	1.7
Residential or domestic sales:						
Farm.....	51,379	66,333,537	1,291	2,328,127	45	3.5
Nonfarm.....	579,585	491,471,378	848	21,932,105	38	4.5
Commercial and industrial sales: <sup>3</sup>						
Farm.....	7,641	160,747,898	21,038	1,940,946	254	1.2
Nonfarm.....	127,605	2,922,056,273	22,899	40,426,859	317	1.4
Public street and highway light- ing.....	832	47,746,920	57,388	1,931,754	2,322	4.0
Sales for resale, total <sup>4</sup> .....	200	2,116,176,054	-----	6,603,440	-----	.3
Sales to other electric utilities:						
Municipal distribution sys- tems.....	65	1,132,067,082	-----	1,609,360	-----	.1
Other electric companies.....	99	954,151,847	-----	4,904,622	-----	.5

See footnotes at end of table.

TABLE 19.—SALES OF ELECTRIC ENERGY, BY MAJOR CLASSES OF SERVICE,  
ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS: 1937—Continued

CLASS OF SERVICE	Number of cus- tomers	CURRENT SOLD		REVENUE FROM ELECTRIC SERVICE		
		Kilowatt- hours	Average kilowatt- hours per customer	Amount	Aver- age per cus- tomer (dollars)	Aver- age per kilo- watt- hour (cents)
PACIFIC						
Total sales.....	2,836,221	14,254,909,738	5,026	\$221,410,484	78	1.6
Sales to ultimate consumers, total <sup>1</sup> .....	2,836,072	11,775,069,255	4,152	208,523,331	74	1.8
Residential or domestic sales:						
Farm.....	138,200	206,731,140	1,496	6,230,121	45	3.0
Nonfarm.....	2,113,787	2,002,156,826	947	64,913,331	31	3.2
Commercial and industrial sales: <sup>2</sup>						
Farm.....	110,896	1,238,664,889	11,170	18,492,958	167	1.5
Nonfarm.....	452,866	6,823,229,963	15,067	99,402,191	219	1.5
Public street and highway lighting.....	3,171	246,237,561	77,653	6,756,183	2,131	2.7
Sales for resale, total <sup>3</sup> .....	149	2,479,840,483	-----	12,887,153	-----	.5
Sales to other electric utilities:						
Municipal distribution systems.....	44	215,732,136	-----	1,934,212	-----	.9
Other electric companies.....	92	2,248,854,258	-----	10,835,607	-----	.5

<sup>1</sup> Includes the following States: New England—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut; Middle Atlantic—New York, New Jersey, Pennsylvania; East North Central—Ohio, Indiana, Illinois, Michigan, Wisconsin; West North Central—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas; South Atlantic—Delaware, District of Columbia, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida; East South Central—Kentucky, Tennessee, Alabama, Mississippi; West South Central—Arkansas, Louisiana, Oklahoma, Texas; Mountain—Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada; Pacific—Washington, Oregon, California.

<sup>2</sup> Includes statistics for "Street and interurban railways," "Electrified steam-railroad divisions," "Inter-departmental," "Other sales to public authorities," and "Other sales to ultimate consumer." These classes of service are not shown in this table.

<sup>3</sup> Includes statistics for "Rural—distinct rural rates only," which cover rural sales as outlined by the "Uniform system of accounts" prescribed by the Federal Power Commission for use of public utilities and licensees under its jurisdiction, as Account No. 601. The type of service represents commercial sales principally, although it is probable the figures include some residential or domestic sales.

<sup>4</sup> Includes statistics for "Mutual or cooperative undertakings" and "Other sales for resale." These classes of service are not shown in this table.

TABLE 20.—NUMBER OF CUSTOMERS—ULTIMATE CONSUMERS ONLY, BY CLASS OF SERVICE, ALL ESTABLISHMENTS, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	Total	RESIDENTIAL OR DOMESTIC SALES		COMMERCIAL AND INDUS- TRIAL SALES <sup>1</sup>		Pub- lic street and high- way light- ing	Other sales to pub- lic au- thori- ties	Sales to rail- roads and rail- ways <sup>2</sup>	Inter- de- part- men- tal	Other sales to ulti- mate con- sum- ers
		Farm	Non- farm	Farm	Non- farm					
UNITED STATES	27,216,336	615,136	21,589,895	600,267	4,313,577	23,182	69,458	476	1,627	2,718
<b>GEOGRAPHIC DIVISIONS:</b>										
New England.....	2,410,432	56,375	1,987,956	4,429	354,753	1,766	3,680	45	170	1,249
Middle Atlantic.....	7,354,767	92,668	5,986,080	87,070	1,175,061	4,098	8,920	131	112	127
East North Central.....	6,443,860	143,723	5,189,420	209,268	881,930	4,861	14,147	119	186	206
West North Central.....	2,587,522	16,187	2,024,699	76,661	460,371	3,823	5,216	46	168	371
South Atlantic.....	2,264,022	80,589	1,753,390	35,224	387,056	1,808	5,574	33	254	94
East South Central.....	985,542	25,044	746,955	35,516	172,447	1,251	3,937	14	36	342
West South Central.....	1,564,615	11,091	1,208,023	32,962	301,488	1,572	9,209	24	65	181
Mountain.....	769,504	51,379	579,585	7,641	127,605	832	2,264	18	102	78
Pacific.....	2,836,072	138,200	2,113,787	110,896	452,866	3,171	16,502	46	534	70

See footnotes at end of table.

TABLE 20.—NUMBER OF CUSTOMERS—ULTIMATE CONSUMERS ONLY, BY CLASS OF SERVICE, ALL ESTABLISHMENTS, BY DIVISIONS AND STATES: 1937—  
Continued

DIVISION AND STATE	Total	RESIDENTIAL OR DOMESTIC SALES		COMMERCIAL AND INDUSTRIAL SALES <sup>1</sup>		Pub- lic street and high- way light- ing	Other sales to pub- lic authori- ties	Sales to rail- roads and rail- ways <sup>2</sup>	Inter- de- part- mental	Other sales to ulti- mate con- sumers
		Farm	Non- farm	Farm	Non- farm					
<b>NEW ENGLAND:</b>										
Maine	208,357	16,664	154,823	835	33,740	422	743	3	3	1,124
New Hampshire	136,988	8,567	106,476	187	20,200	218	1,324	4	3	10
Vermont and Rhode Island <sup>3</sup>	285,094	6,645	235,118	1,245	41,265	280	518	18		4
Massachusetts	1,295,577	14,044	1,085,652	1,246	192,632	739	997	15	156	96
Connecticut	484,416	10,455	405,887	916	66,916	107	107	5	8	15
<b>MIDDLE ATLANTIC:</b>										
New York	3,843,842	49,950	3,146,258	39,882	602,799	1,690	3,038	54	84	87
New Jersey	1,212,648	13,551	1,000,805	6,187	189,492	670	1,869	7	7	
Pennsylvania	2,298,277	29,067	1,838,957	41,601	382,770	1,738	4,013	70	21	40
<b>EAST NORTH CENTRAL:</b>										
Ohio	1,728,261	49,439	1,387,971	60,154	223,143	908	6,560	54	24	8
Indiana	772,940	13,372	596,967	43,981	113,453	948	4,071	37	100	11
Illinois	1,973,611	1,314	1,661,023	42,346	266,827	1,148	909	17	10	17
Michigan	1,258,536	77,544	1,005,287	6,185	167,639	867	931	8	25	70
Wisconsin	710,512	2,054	538,192	56,602	110,868	990	1,676	3	27	100
<b>WEST NORTH CENTRAL:</b>										
Minnesota	538,986	7,088	420,716	13,105	96,466	724	829	6	22	30
Iowa	508,790	1,428	388,516	27,530	89,668	861	710	12	25	40
Missouri	738,765	3,691	596,487	14,037	122,999	536	992	5	5	13
North Dakota	80,088	191	58,432	463	20,380	384	202	3	3	
South Dakota	92,296	267	68,183	1,599	21,622	274	344		5	
Nebraska	262,172	870	205,006	7,923	47,274	465	579	6	42	9
Kansas	366,455	2,632	287,359	12,004	61,962	579	1,560	14	66	279
<b>SOUTH ATLANTIC:</b>										
Delaware, Maryland, and District of Columbia <sup>3</sup>	504,602	5,057	499,188	4,509	85,080	249	592	7	10	
Virginia	338,049	10,587	265,304	5,365	55,498	263	946	10	13	63
West Virginia	239,244	7,124	190,119	2,930	37,624	215	1,176	10	46	
North Carolina	345,183	27,123	241,548	11,367	64,087	315	631		111	
South Carolina	146,478	11,031	98,629	5,249	31,204	214	124		3	25
Georgia	282,618	13,593	211,334	3,705	53,500	365	112		6	
Florida	317,738	6,074	247,268	2,099	60,063	187	1,993	6	71	6
<b>EAST SOUTH CENTRAL:</b>										
Kentucky	318,051	2,917	253,347	8,612	50,717	317	2,121	3	5	14
Tennessee	304,188	16,801	230,771	5,401	50,205	206	733	4	15	
Alabama	235,421	1,969	172,271	17,521	42,357	418	348		9	322
Mississippi	127,932	3,357	90,566	3,982	28,968	310	735	7	7	6
<b>WEST SOUTH CENTRAL:</b>										
Arkansas	146,665	143	102,812	5,216	36,765	273	1,398	5	5	51
Louisiana	256,383	5,269	205,173	716	44,202	224	706		6	84
Oklahoma	307,608	838	232,492	9,731	61,871	335	2,284	5	8	
Texas	853,959	4,841	667,546	17,299	158,650	740	4,821	14	46	46
<b> MOUNTAIN:</b>										
Montana	105,873	2,417	80,158	1,418	21,612	171	52		40	3
Idaho	102,631	18,758	67,538	1,205	14,026	126	933	4	14	10
Wyoming	40,414	669	32,449	388	6,805	45	47		4	6
Colorado	235,740	8,286	181,867	2,295	42,803	194	275	3	9	8
New Mexico and Arizona <sup>3</sup>	134,344	7,532	100,520	1,153	24,678	105	282	3	20	51
Utah	126,062	13,070	98,359	600	13,221	158	640	8	7	
Nevada	24,440	647	18,694	582	4,460	33	15		8	
<b>PACIFIC:</b>										
Washington	482,677	40,153	362,018	13,520	64,961	663	1,246	15	84	19
Oregon	274,003	21,031	197,445	9,251	44,840	240	1,180	5	5	19
California	2,079,392	77,016	1,554,324	88,125	343,065	2,268	14,076	26	450	42

<sup>1</sup>This classification covers rural sales as outlined by the "Uniform System of Accounts" prescribed by the Federal Power Commission for use of public utilities and licensees under its jurisdiction, as Account No. 601. It was not extensively used, however, by reporting establishments in all geographic divisions. The type of service represents commercial sales principally, although it is probable the figures include some residential or domestic sales.

<sup>2</sup>Includes sales to "Street and interurban railways" and "Electrified steam-railroad divisions."

<sup>3</sup>Combined to avoid disclosure of individual operations.

TABLE 21.—TOTAL SALES<sup>1</sup>—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, ALL ESTABLISHMENTS, BY DIVISIONS AND STATES: 1937 AND 1932

DIVISION AND STATE	NUMBER OF CUS-TOMERS		CURRENT SOLD ( <i>kilowatt-hours</i> )		REVENUE FROM ELECTRIC SERVICE	
	1937	1932	1937	1932	1937	1932
UNITED STATES.....	27,219,362	23,861,642	132,929,517,239	88,265,073,126	\$2,356,513,119	\$1,975,303,955
GEOGRAPHIC DIVISIONS:						
New England.....	2,410,789	2,225,938	10,207,611,608	8,120,190,941	207,203,132	182,797,544
Middle Atlantic.....	7,355,096	6,675,352	32,253,987,438	21,967,213,770	635,905,098	559,818,749
East North Central.....	6,444,437	5,651,145	32,732,713,167	21,546,548,547	500,513,436	461,061,595
West North Central.....	2,588,245	2,327,587	8,089,259,477	5,866,945,224	192,347,227	165,960,425
South Atlantic.....	2,264,384	1,778,954	15,631,550,060	9,388,092,655	233,859,243	180,233,065
East South Central.....	985,691	773,496	6,883,011,157	5,624,347,396	91,662,639	70,267,238
West South Central.....	1,564,795	1,234,780	6,599,784,311	4,520,804,960	134,650,526	108,975,164
Mountain.....	789,694	634,003	6,276,690,283	2,321,594,425	73,871,334	55,333,696
Pacific.....	2,836,221	2,560,337	14,254,909,738	10,909,335,208	221,410,484	190,856,479
NEW ENGLAND:						
Maine.....	208,401	186,606	948,837,373	677,696,825	15,127,709	12,832,420
New Hampshire.....	137,039	120,600	804,593,119	721,651,318	13,785,465	12,039,340
Vermont, Rhode Island, and Connecticut <sup>2</sup> .....	789,620	712,223	3,355,309,779	2,431,823,071	69,956,033	60,125,624
Massachusetts.....	1,293,729	1,206,508	5,098,811,337	4,289,019,727	108,333,835	97,800,160
MIDDLE ATLANTIC:						
New York and New Jersey <sup>2</sup> .....	5,056,680	4,631,927	20,953,077,470	13,334,327,815	429,307,224	377,817,135
Pennsylvania.....	2,298,416	2,043,425	11,300,909,968	8,632,885,955	208,687,874	182,001,614
EAST NORTH CENTRAL:						
Ohio.....	1,728,423	1,506,421	7,900,474,992	5,185,327,153	141,765,899	118,410,818
Indiana.....	773,069	653,300	4,748,342,727	2,912,463,740	72,737,199	56,803,151
Illinois.....	1,973,703	1,808,753	11,747,935,739	8,369,017,621	186,742,050	160,090,996
Michigan.....	1,258,585	1,050,628	5,564,223,645	3,108,963,299	103,904,214	78,390,320
Wisconsin.....	710,657	632,043	2,771,736,064	1,970,776,734	55,364,074	47,357,310
WEST NORTH CENTRAL:						
Minnesota.....	539,112	484,216	1,047,457,108	1,109,421,519	41,040,385	35,145,770
Iowa.....	508,981	460,770	1,628,096,344	949,496,363	37,461,100	30,963,097
Missouri.....	738,843	655,872	2,830,475,477	2,829,239,304	57,177,143	50,763,111
North Dakota and South Dakota <sup>2</sup> .....	172,388	155,173	302,830,495	203,679,986	11,970,110	10,693,385
Nebraska.....	262,328	236,149	676,501,009	538,441,641	18,270,799	16,524,253
Kansas.....	366,593	335,402	1,003,899,044	736,666,411	25,521,690	21,870,804
SOUTH ATLANTIC:						
Delaware, Maryland, District of Columbia, and West Virginia <sup>2</sup> .....	834,006	691,680	6,568,767,907	3,534,430,493	87,452,098	65,838,413
Virginia.....	338,081	267,667	1,292,982,786	895,833,163	28,269,491	22,291,738
North Carolina.....	345,281	262,924	3,625,621,172	2,211,247,954	39,534,402	31,240,480
South Carolina.....	146,537	107,240	1,625,695,881	1,230,030,529	20,347,353	16,919,278
Georgia.....	282,694	211,705	1,674,972,458	1,015,356,083	29,105,590	22,723,200
Florida.....	317,785	237,729	843,509,766	501,194,433	28,850,309	21,219,956
EAST SOUTH CENTRAL:						
Kentucky.....	318,103	272,546	1,257,707,611	866,872,173	24,924,310	21,236,042
Tennessee.....	304,188	238,045	2,679,224,476	1,087,940,890	29,956,978	20,624,558
Alabama.....	235,450	171,136	2,546,317,971	1,467,957,507	26,614,407	20,807,527
Mississippi.....	127,950	91,769	419,761,099	201,576,826	10,166,944	7,599,111
WEST SOUTH CENTRAL:						
Arkansas and Oklahoma <sup>2</sup> .....	454,345	383,874	1,562,817,939	1,061,204,871	37,584,034	31,089,617
Louisiana.....	256,415	191,252	1,711,583,736	1,158,348,098	24,862,367	19,960,221
Texas.....	854,035	659,654	3,305,382,036	2,301,251,993	72,203,225	57,925,326
MOUNTAIN:						
Montana and Utah <sup>2</sup> .....	231,983	194,902	2,151,736,125	917,592,502	24,850,904	18,046,376
Idaho.....	102,673	77,756	1,237,094,215	507,611,143	11,307,331	7,271,946
Wyoming.....	40,448	34,677	162,565,972	68,775,290	4,334,361	2,999,994
Colorado and Nevada <sup>2</sup> .....	260,223	227,981	1,814,048,060	460,428,147	22,215,496	16,985,012
New Mexico and Arizona <sup>2</sup> .....	134,377	98,707	911,245,911	367,187,253	16,163,242	10,030,368
PACIFIC:						
Washington.....	482,735	417,526	3,251,212,232	2,371,535,171	37,872,279	31,787,035
Oregon.....	274,024	237,338	1,201,978,130	820,740,885	21,206,157	16,417,335
California.....	2,079,462	1,905,523	9,801,719,376	7,717,059,152	162,332,048	142,061,109

<sup>1</sup> Includes sales to ultimate consumers and sales for resale.

<sup>2</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 22.—CURRENT GENERATED AND ENERGY RECEIVED FROM OTHER SOURCES, ALL ESTABLISHMENTS, BY GEOGRAPHIC DIVISIONS: 1937

DIVISION	Total output <sup>1</sup> (kilowatt-hours)	Generated out- put (kilowatt- hours)	RECEIVED FROM OTHER SOURCES (kilowatt-hours)			
			Energy purchased		Other receipts of energy <sup>2</sup>	Other receipts of energy <sup>2</sup>
			Total	From other electric systems		
UNITED STATES.....	168,299,856,881	121,097,430,896	47,202,225,985	34,110,614,947	32,649,935,135	1,460,679,812
GEOGRAPHIC DIVISIONS: <sup>3</sup>						
New England.....	11,895,928,681	7,577,025,366	4,318,908,315	3,965,280,732	3,876,315,511	88,065,241
Middle Atlantic.....	40,825,166,656	29,776,425,143	11,048,741,513	7,433,780,433	7,005,784,344	427,996,139
East North Central.....	37,798,967,864	28,592,169,250	9,206,838,725	8,231,903,084	7,943,542,817	974,955,641
West North Central.....	10,318,735,649	7,694,000,130	2,794,136,419	2,175,038,500	2,008,106,897	166,931,603
South Atlantic.....	22,331,189,215	15,080,259,531	7,250,926,684	4,046,257,995	3,980,261,863	68,065,102
East South Central.....	8,187,095,333	5,535,479,371	3,231,615,942	2,273,661,182	2,199,815,934	73,845,248
West South Central.....	8,128,650,043	6,443,606,022	1,664,954,021	1,135,389,332	1,063,976,951	71,612,411
Mountain.....	9,350,399,188	5,781,982,500	3,568,416,688	2,241,756,158	2,070,777,859	529,365,729
Pacific.....	18,803,526,202	14,685,855,574	4,111,672,628	2,607,337,401	2,501,412,920	1,326,460,600

<sup>1</sup> Includes generated output and energy received from other sources. Since the energy received from other sources was, in large part, purchased from other electric light and power companies, a considerable duplication is involved, as such energy would also be included in the "Generated."

<sup>2</sup> Includes energy reported as received "From own system outside State" and "Other."

<sup>3</sup> See footnote 1, table 19.

#### **Chapter IV.—FUEL-BURNING AND HYDROELECTRIC GENERATING STATIONS**

Separate statistics for hydroelectric generating plants were shown for the first time in the census for 1912. For that year, and for 1917 and 1922, only those establishments which reported water power of 1,000 horsepower or more, including some which reported both water and other power, were considered as hydroelectric plants. Statistics for these establishments, necessarily, included a small amount of steam power, since establishments combining steam and moderately large water-power developments were included, while on the other hand, statistics for smaller water-power plants were excluded.

**Hydroelectric groupings.**—Beginning with the census for 1927, data for establishments reporting water power have been presented in the following groupings: (1) Those reporting water power of 1,000 horsepower or more; (2) those reporting 50 percent or more of their current generated by means of water power; (3) all establishments reporting water power; and (4) establishments reporting water power only. There is obviously considerable overlapping in some of these groups (table 25), since data reported by numerous establishments are included in more than one of the groupings. However, in table 23, separate figures are given for generators driven by power derived from fuel and for those driven by water power, while table 24 shows the amount of current generated by fuel-burning and by hydroelectric equipment, disregarding the classifications of the establishments.

**Comparison with census for 1932.**—A comparison of the several items in all groupings with similar statistics for 1932 shows considerable increase in the majority of the items. The number of prime movers, however, follows the downward trend characteristic of the present tendency toward the consolidation of generating facilities into fewer and larger units. In marked contrast to the normal increase observed in the several other types of prime movers as well as for the industry as a whole, the total horsepower capacity of steam turbines used in the generation of electric energy has decreased in certain of the groups. These decreases are due, in a large measure, to changes in the classification of identical establishments in the two census years. The "Establishments reporting water power only" group includes statistics for 37 establishments that reported their entire output as generated by water power, although their reports showed a negligible amount of idle equipment other than hydroelectric. The generated output of these establishments amounted to 654,514,937 kilowatt-hours, while the rated capacity of their generators driven by water power was reported as 304,197 kilowatts.

**Combination of hydroelectric and fuel-burning plants.**—In numerous instances water-power and fuel-burning plants are combined in a single establishment. By such a combination maximum advantage can be taken of available stream flow at any given time, fuel being used only for providing the additional energy to meet the demand.

On the other hand, during periods of low water, a possible deficiency can be carried by steam plants. As a consequence of the latter consideration the "Establishments which report water power only" group accounts for a relatively small part of the industry totals. On the other hand, "Establishments reporting 1,000 horsepower or more" reported 55.9 percent of the total generated output of the industry as a whole, while "Establishments reporting 50 percent or more current generated by water power" reported 38.7 percent. It is interesting to note that "All establishments reporting water power" reported 40.8 percent of the total rated capacity of steam turbines reported for the industry as a whole.

**Comparison by regions.**—The Pacific group is by far the predominant water-power geographic division, although the Mountain and the East South Central divisions also reported more than 50 percent of their rated generator capacity as hydroelectric.

TABLE 23.—GENERATOR CAPACITY OF FUEL-BURNING AND OF HYDROELECTRIC EQUIPMENT, ALL ESTABLISHMENTS, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	RATED GENERATOR CAPACITY ( <i>kilo-watts</i> )			PERCENT OF TOTAL	
	Total	Fuel	Hydro	Fuel	Hydro
UNITED STATES.....	36,481,107	25,882,645	10,508,462	70.9	29.1
GEOGRAPHIC DIVISIONS:					
New England.....	2,752,721	1,836,219	916,502	66.7	33.3
Middle Atlantic.....	8,838,327	7,327,874	1,510,453	82.9	17.1
East North Central.....	8,289,089	7,394,224	694,845	91.6	8.4
West North Central.....	2,728,008	2,280,461	438,547	83.9	16.1
South Atlantic.....	4,447,880	2,432,009	2,015,871	54.7	45.3
East South Central.....	1,857,809	755,818	1,101,991	40.7	59.3
West South Central.....	1,791,336	1,689,716	101,620	94.3	5.7
Mountain.....	1,662,650	500,730	1,161,920	30.1	69.9
Pacific.....	4,113,307	1,456,594	2,656,713	35.4	64.6
NEW ENGLAND:					
Maine.....	259,857	57,457	202,400	22.1	77.9
New Hampshire.....	208,021	62,014	236,907	20.7	79.3
Vermont and Rhode Island <sup>1</sup> .....	404,651	239,411	165,240	59.2	40.8
Massachusetts.....	1,210,310	992,386	217,933	82.0	18.0
Connecticut.....	578,973	484,951	94,022	83.8	16.2
MIDDLE ATLANTIC:					
New York.....	4,837,375	3,723,022	1,114,353	77.0	23.0
New Jersey.....	1,066,890	1,064,490	2,400	99.8	.2
Pennsylvania.....	2,934,062	2,540,362	393,700	86.6	13.4
EAST NORTH CENTRAL:					
Ohio.....	2,179,100	2,167,100	12,000	99.4	.6
Indiana.....	1,038,307	1,003,094	35,303	96.6	3.4
Illinois.....	2,396,977	2,349,546	47,431	98.0	2.0
Michigan.....	1,754,288	1,395,014	359,274	79.5	20.5
Wisconsin.....	920,307	679,470	240,837	73.8	26.2
WEST NORTH CENTRAL:					
Minnesota.....	516,245	391,425	124,820	75.8	24.2
Iowa.....	607,748	474,844	132,904	78.1	21.9
Missouri.....	765,771	608,596	157,175	79.5	20.5
North Dakota.....	73,177	73,177	-----	100.0	-----
South Dakota.....	76,573	71,898	4,675	93.9	6.1
Nebraska.....	269,611	257,490	12,121	95.5	4.5
Kansas.....	418,883	412,031	6,852	98.4	1.6
SOUTH ATLANTIC:					
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	844,878	573,493	271,385	67.9	32.1
Virginia.....	439,167	342,012	97,155	77.9	22.1
West Virginia.....	638,878	537,898	100,980	84.2	15.8
North Carolina.....	992,327	330,502	652,825	34.2	65.8
South Carolina.....	675,721	137,871	537,850	20.4	79.6
Georgia.....	483,792	142,459	341,333	29.4	70.6
Florida.....	373,117	358,774	14,343	96.2	3.8
EAST SOUTH CENTRAL:					
Kentucky.....	343,068	237,883	105,185	69.3	30.7
Tennessee.....	526,380	208,237	318,143	39.6	60.4
Alabama.....	922,996	244,333	678,663	26.5	73.5
Mississippi.....	65,365	65,365	-----	100.0	-----
WEST SOUTH CENTRAL:					
Arkansas.....	161,336	94,630	66,706	58.7	41.3
Louisiana.....	327,815	327,815	-----	100.0	-----
Oklahoma.....	336,246	334,622	1,624	99.5	.5
Texas.....	965,939	932,649	33,290	96.6	3.4
MOUNTAIN:					
Montana.....	277,550	11,895	265,655	4.3	95.7
Idaho.....	260,025	4,691	255,334	1.8	98.2
Wyoming.....	63,126	46,654	16,472	73.9	26.1
Colorado.....	227,824	162,830	64,004	71.5	28.5
Arizona and New Mexico <sup>1</sup> .....	305,626	177,469	128,157	58.1	41.9
Utah.....	160,434	68,742	91,692	42.8	57.2
Nevada.....	368,065	28,449	339,616	7.7	92.3
PACIFIC:					
Washington.....	1,005,959	204,996	800,963	20.4	79.6
Oregon.....	371,131	180,935	190,196	48.8	51.2
California.....	2,736,217	1,070,663	1,665,554	39.1	60.9

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 24.—CURRENT GENERATED BY FUEL-BURNING AND BY HYDROELECTRIC EQUIPMENT, ALL ESTABLISHMENTS, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	CURRENT GENERATED (kilowatt-hours)			PERCENT OF TOTAL	
	Total	Fuel	Hydro	Fuel	Hydro
UNITED STATES.....	121,097,430,896	75,318,724,778	45,778,706,118	62.2	37.8
GEOGRAPHIC DIVISIONS:					
New England.....	7,577,025,366	4,174,531,675	3,402,483,691	55.1	44.9
Middle Atlantic.....	29,776,425,143	21,462,765,801	8,313,659,342	72.1	27.9
East North Central.....	28,592,100,259	25,935,592,928	2,656,516,331	90.7	9.3
West North Central.....	7,554,600,130	5,688,841,362	1,865,758,768	75.3	24.7
South Atlantic.....	15,080,259,531	6,804,657,085	8,275,602,446	45.1	54.9
East South Central.....	5,585,479,371	1,594,349,369	3,991,130,002	28.5	71.5
West South Central.....	6,463,696,022	6,214,906,517	248,789,505	96.2	3.8
Mountain.....	5,781,982,500	1,381,536,307	4,400,446,193	23.9	76.1
Pacific.....	14,685,853,574	2,061,543,734	12,624,309,840	14.0	86.0
NEW ENGLAND:					
Maine.....	1,032,910,262	48,755,648	984,154,614	4.7	95.3
New Hampshire.....	760,114,088	56,479,505	703,634,583	7.4	92.6
Vermont and Rhode Island <sup>1</sup> .....	1,203,178,803	639,010,156	654,168,647	49.4	50.6
Massachusetts.....	2,852,087,311	2,160,079,926	686,007,385	75.9	24.1
Connecticut.....	1,688,734,902	1,264,206,440	374,528,462	77.1	22.9
MIDDLE ATLANTIC:					
New York.....	15,582,897,247	9,312,271,645	6,270,625,602	59.8	40.2
New Jersey.....	3,707,988,218	3,678,616,342	29,371,876	99.2	.8
Pennsylvania.....	10,485,539,678	8,471,877,814	2,013,061,864	80.8	19.2
EAST NORTH CENTRAL:					
Ohio.....	8,070,468,170	8,033,164,589	37,303,581	99.5	.5
Indiana.....	3,736,887,519	3,587,526,563	149,360,956	96.0	4.0
Illinois.....	8,059,574,262	7,832,780,620	226,793,642	97.2	2.8
Michigan.....	6,028,307,730	4,703,955,597	1,324,352,133	78.0	22.0
Wisconsin.....	2,696,871,578	1,778,165,559	918,706,019	65.9	34.1
WEST NORTH CENTRAL:					
Minnesota.....	1,480,700,417	981,955,552	498,744,865	66.3	33.7
Iowa.....	1,887,399,347	1,162,707,009	724,692,333	61.6	38.4
Missouri.....	1,870,848,171	1,290,852,582	579,995,589	69.0	31.0
North Dakota.....	200,840,952	200,840,952	-----	100.0	-----
South Dakota.....	144,810,035	135,778,735	9,031,300	93.8	6.2
Nebraska.....	703,907,133	672,385,383	31,521,750	95.5	4.5
Kansas.....	1,266,094,075	1,244,321,149	21,772,926	98.3	1.7
SOUTH ATLANTIC:					
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	2,965,672,767	1,340,069,980	1,625,602,787	45.2	54.8
Virginia.....	1,638,742,805	1,213,125,326	425,617,479	74.0	26.0
West Virginia.....	2,833,718,720	2,469,068,991	364,654,729	87.1	12.9
North Carolina.....	3,215,857,638	416,354,381	2,799,503,257	12.9	87.1
South Carolina.....	1,752,429,717	143,760,689	1,608,669,028	8.2	91.8
Georgia.....	1,758,630,581	355,686,165	1,402,944,416	20.2	79.8
Florida.....	915,207,303	866,596,553	48,610,750	94.7	5.3
EAST SOUTH CENTRAL:					
Kentucky.....	894,607,801	586,309,522	308,298,279	65.5	34.5
Tennessee.....	1,841,302,173	572,412,959	1,268,889,214	31.1	68.9
Alabama.....	2,771,901,772	357,959,263	2,413,942,509	12.9	87.1
Mississippi.....	77,667,625	77,667,625	-----	100.0	-----
WEST SOUTH CENTRAL:					
Arkansas.....	279,107,212	139,645,164	130,462,048	50.0	50.0
Louisiana.....	1,730,855,751	1,730,855,751	-----	100.0	-----
Oklahoma.....	1,107,549,981	1,105,873,148	1,676,833	99.8	.2
Texas.....	3,346,183,078	3,238,532,454	107,650,624	96.8	3.2
MOUNTAIN:					
Montana.....	1,319,065,010	22,970,459	1,296,094,551	1.7	98.3
Idaho.....	973,594,978	1,509,654	972,085,324	.2	99.8
Wyoming.....	161,506,192	119,267,666	42,328,526	73.8	26.2
Colorado.....	681,741,410	461,819,330	219,922,080	67.7	32.3
Arizona and New Mexico <sup>1</sup> .....	903,529,069	479,021,516	424,508,153	53.0	47.0
Utah.....	519,936,637	218,873,164	301,063,473	42.1	57.9
Nevada.....	1,222,518,604	78,074,518	1,144,444,086	6.4	93.6
PACIFIC:					
Washington.....	3,693,204,079	396,677,354	3,296,526,725	10.7	89.3
Oregon.....	1,393,361,394	387,726,266	1,005,635,128	27.8	72.2
California.....	9,590,288,101	1,277,140,114	8,322,147,987	13.3	86.7

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 25.—SUMMARY, ALL ESTABLISHMENTS AND HYDROELECTRIC ESTABLISHMENTS: 1937

	All establish- ments <sup>1</sup>	All estab- lishments reporting water power	Establishments reporting 50 percent or more current generated by water power	Establishments reporting water power of 1,000 horsepower or more	Establish- ments report- ing water power only <sup>2</sup>
Number of establishments	3,501	572	462	314	316
Percent of all estab- lishments	100.0	16.3	13.2	9.0	9.0
Prime movers:					
Number	10,824	5,670	3,638	4,603	1,282
Percent of all estab- lishments	100.0	52.4	33.6	42.5	11.8
Horsepower	50,220,081	29,367,195	18,095,511	26,590,334	5,677,663
Percent of all estab- lishments	100.0	58.5	36.0	52.9	11.3
Steam engines—					
Number	854	254	94	187	* 16
Percent of all estab- lishments	100.0	29.7	11.0	21.9	1.9
Horsepower	711,987	348,097	82,835	381,973	* 6,255
Percent of all estab- lishments	100.0	48.9	11.6	46.6	0.9
Steam turbines—					
Number	2,727	1,008	350	852	* 21
Percent of all estab- lishments	100.0	37.0	12.8	31.2	0.8
Horsepower	33,177,336	13,522,620	3,860,582	11,148,438	* 107,903
Percent of all estab- lishments	100.0	40.8	11.6	33.6	0.3
Internal-combustion en- gines—					
Number	3,495	660	279	389	* 21
Percent of all estab- lishments	100.0	18.9	8.0	11.1	0.6
Horsepower	1,100,581	268,281	122,211	188,473	* 3,358
Percent of all estab- lishments	100.0	24.2	11.1	16.9	0.3
Hydroturbines and water wheels—					
Number	3,748	3,748	2,915	3,175	1,224
Percent of all estab- lishments	100.0	100.0	77.8	84.7	32.7
Horsepower	15,230,197	15,230,197	14,029,883	14,923,450	5,560,147
Percent of all estab- lishments	100.0	100.0	92.1	98.0	36.5
Generators:					
Number	10,721	5,555	3,606	4,572	1,271
Percent of all estab- lishments	100.0	51.8	33.6	42.6	11.9
Kilowatt capacity	36,481,107	21,104,913	12,745,179	19,061,254	3,952,129
Percent of all estab- lishments	100.0	57.9	34.9	52.2	10.8
Current generated, kilo- watt-hours	121,097,430,896	75,131,415,574	46,807,358,546	67,695,527,916	17,235,871,629
Percent of all estab- lishments	100.0	62.0	38.7	55.9	14.2
Total sales: <sup>4</sup>					
Number of customers	27,219,362	13,142,961	5,633,976	10,972,049	704,547
Percent of all estab- lishments	100.0	48.3	20.7	40.3	2.6
Kilowatt-hours sold	132,929,517,239	78,430,261,281	47,097,864,005	69,641,008,384	15,893,023,198
Percent of all estab- lishments	100.0	59.0	35.4	52.4	12.0
Total revenue	\$2,356,513,119	\$1,207,804,901	\$574,974,687	\$1,027,036,720	\$104,364,397
Percent of all estab- lishments	100.0	51.3	24.4	43.6	4.4

<sup>1</sup> Includes establishments which purchased all current distributed.<sup>2</sup> Includes data for 37 establishments that reported their entire output generated by waterpower, although their reports showed idle generating equipment other than hydroelectric. See footnote 3.<sup>3</sup> Reported as idle equipment.<sup>4</sup> Includes figures relating to "Sales for resale."

## Chapter V.—PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES

This chapter presents separate statistics for privately owned and municipally owned electric utilities, giving detailed statistics by geographic divisions and States for the principal items of the schedule. Of the five major groups (reporting sources) into which the industry has been divided for analytical purposes in the 1937 Census of Electric Light and Power industry, the "privately owned and municipally owned electric utilities" groups represented a very great proportion of the several inquiries covering statistics for the industry as a whole. The following condensed statement will serve to indicate the dominant importance, within the industry, of these two groups. The combined generated output of privately owned and municipally owned electric utilities, as reported for 1937, was 115,173,469,769 kilowatt-hours, or 95.1 percent of the total reported for the entire industry. The combined generator capacity of these two groups was 34,692,265 kilowatts, or 95.1 percent of the total. In "Sales to ultimate consumers," these two groups reported 27,089,682 customers served, 99,198,412,660 kilowatt-hours sold, and revenue for such service amounted to \$2,156,477,948, representing 99.5, 96.2, and 99 percent, respectively, of the totals reported for the industry.

**Comparison with earlier censuses.**—Prior to 1937, the industry was divided into two major classifications: (1) "Municipal," covering all municipally owned electric plants that sold energy commercially, and (2) "Commercial," covering all reporting establishments that were not classified as "Municipal." In this report, certain municipal concerns that operated generating plants principally for their own use (lighting streets, operating municipal street railways or pumping stations, etc.), but incidentally sold a relatively small amount of current, have been classified in the "Other sources" group, and statistics for such concerns are included under that classification. (See ch. II, pp. 16 to 24.) However, there were relatively few concerns of this type, and the comparability of "Municipally owned electric utilities" as presented for 1937 and "Municipal" as presented for former census years is not greatly affected by this change in classification. Statistics for "Privately owned electric utilities" as published in this report only include data for utilities operated by corporations, firms or partnerships, or individuals; therefore, these statistics are not comparable with those presented in earlier censuses as "Commercial," since the latter classification included data for manufacturing, mining, railway, railroad, and similar concerns in which the sale of electric energy was merely incidental to their normal activities. Statistics for such establishments are included in the "Other sources" group for 1937. In addition, a few mutual or cooperative undertakings, and power and irrigation districts, which are classified in the "Cooperative and power district" group for 1937,

were included in "Commercial" in earlier censuses. (See ch. II, pp. 16 to 24.)

**Comparison of "privately owned electric utilities" and "municipally owned electric utilities."**—In making any comparison between the statistics for privately owned electric utilities, and the statistics for municipally owned electric utilities, it should be borne in mind that these two types of utilities operate on very different bases. While municipally owned utilities, as a rule, operate in comparatively small communities, serving a limited number of customers, privately owned utilities are generally much larger, and serve a greater territory, often operating in several States by means of transmission systems. Naturally, due consideration should be given to the relative scope of operations, source and cost of energy, taxes, local operating conditions, kinds of services rendered, types of equipment, and many other frequently variable factors, before valid conclusions as to comparative rates and service can be reached.

In order to make possible an increase in the body of tabular material in this chapter, comment on the various items in the tables has been omitted. As the changes in industry subclassifications, noted above, have affected the comparability of the 1937 figures for privately owned and municipally owned electric utilities with the statistics of earlier census years, only statistics for 1937 are presented.

TABLE 26.—NUMBER OF ESTABLISHMENTS GENERATING AND DISTRIBUTING ONLY, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	Total	GENERATING ENERGY			DISTRIBUTING ONLY		
		Total	Pri-vately owned electric utilities	Munici-pally owned electric utilities	Total	Pri-vately owned electric utilities	Munici-pally owned electric utilities
UNITED STATES.....	3,200	1,703	818	885	1,497	522	975
<b>GEOGRAPHIC DIVISIONS:</b>							
New England.....	251	110	94	25	132	80	52
Middle Atlantic.....	242	107	68	39	135	72	63
East North Central.....	608	296	114	182	312	100	212
West North Central.....	933	604	157	347	429	88	341
South Atlantic.....	344	146	83	63	198	49	149
East South Central.....	130	75	37	38	55	22	33
West South Central.....	244	187	71	116	57	22	35
Mountain.....	201	191	132	59	100	46	54
Pacific.....	157	78	62	16	79	43	36
NEW ENGLAND:							
Maine.....	52	26	22	4	26	23	3
New Hampshire.....	29	17	14	3	12	8	4
Vermont and Rhode Island <sup>1</sup> .....	54	27	18	9	27	20	7
Massachusetts.....	97	38	31	7	50	25	34
Connecticut.....	19	11	9	2	8	4	4
MIDDLE ATLANTIC:							
New York.....	116	53	36	17	63	27	36
New Jersey.....	21	10	6	4	11	4	7
Pennsylvania.....	105	44	26	18	61	41	20
EAST NORTH CENTRAL:							
Ohio.....	167	66	15	51	101	31	70
Indiana.....	125	52	19	33	73	24	49
Illinois.....	96	59	21	38	36	17	19
Michigan.....	80	57	23	34	23	8	15
Wisconsin.....	141	62	36	26	79	20	59
WEST NORTH CENTRAL:							
Minnesota.....	157	75	22	53	82	11	71
Iowa.....	189	95	25	70	94	26	68
Missouri.....	110	75	32	43	35	18	17
North Dakota.....	31	26	11	15	5	3	2
South Dakota.....	75	56	28	28	19	9	10
Nebraska.....	100	97	24	73	102	5	97
Kansas.....	172	80	15	65	92	16	76
SOUTH ATLANTIC:							
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	35	20	12	8	15	8	7
Virginia.....	38	25	18	9	13	6	7
West Virginia.....	34	12	11	1	22	19	3
North Carolina.....	96	32	17	15	64	7	57
South Carolina.....	37	12	10	2	25	5	20
Georgia.....	61	15	8	7	46	1	45
Florida.....	43	30	9	21	13	3	10
EAST SOUTH CENTRAL:							
Kentucky.....	29	22	10	6	7	8	4
Tennessee.....	40	20	12	8	20	12	8
Alabama.....	28	8	4	4	20	5	15
Mississippi.....	33	25	5	20	8	2	6
WEST SOUTH CENTRAL:							
Arkansas.....	39	30	17	13	9	8	1
Louisiana.....	44	38	14	24	6	1	5
Oklahoma.....	92	66	14	42	36	7	29
Texas.....	60	63	26	37	6	6	-----
MOUNTAIN:							
Montana.....	31	26	22	4	5	5	-----
Idaho.....	37	18	14	4	19	8	11
Wyoming.....	44	27	21	6	17	6	11
Colorado.....	63	46	23	23	17	9	8
New Mexico and Arizona <sup>1</sup> .....	51	39	36	3	12	9	3
Utah.....	48	27	9	18	21	4	17
Nevada.....	17	8	7	1	9	5	4
PACIFIC:							
Washington.....	50	26	22	4	33	20	13
Oregon.....	38	27	21	6	11	6	5
California.....	60	25	19	6	35	17	13

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 27.—NUMBER OF ESTABLISHMENTS REPORTING GENERATING EQUIPMENT AND HORSEPOWER OF PRIME MOVERS, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	NUMBER OF ESTABLISHMENTS REPORTING GENERATING EQUIPMENT			HORSEPOWER OF PRIME MOVERS		
	Total	Privately owned electric utilities	Municipally owned electric utilities	Total	Privately owned electric utilities	Municipally owned electric utilities
UNITED STATES.....	1,772	847	925	47,740,355	44,285,739	3,454,616
GEOGRAPHIC DIVISIONS:						
New England.....	126	98	28	3,699,240	3,600,223	99,017
Middle Atlantic.....	118	77	41	11,912,317	11,763,176	149,141
East North Central.....	308	115	193	10,993,960	10,224,007	769,953
West North Central.....	513	160	353	3,702,031	3,087,873	614,158
South Atlantic.....	164	89	75	5,879,750	5,636,356	243,394
East South Central.....	79	39	40	1,855,071	1,770,646	75,425
West South Central.....	195	77	118	2,418,118	2,207,800	210,318
Mountain.....	193	132	61	1,656,961	1,565,932	91,029
Pacific.....	76	60	16	5,622,907	4,420,726	1,202,181
NEW ENGLAND:						
Maine.....	28	23	5	332,314	330,718	1,598
New Hampshire.....	17	14	3	451,900	449,784	2,116
Vermont and Rhode Island <sup>1</sup> .....	27	18	9	501,566	488,134	13,432
Massachusetts.....	42	33	9	1,642,852	1,574,164	68,688
Connecticut.....	12	10	2	770,608	757,423	13,185
MIDDLE ATLANTIC:						
New York.....	58	40	19	6,464,390	6,386,531	77,859
New Jersey.....	11	7	4	1,526,200	1,511,484	14,716
Pennsylvania.....	48	30	18	3,921,727	3,865,161	56,566
EAST NORTH CENTRAL						
Ohio.....	67	15	52	2,915,843	2,683,298	232,545
Indiana.....	53	20	33	1,402,555	1,179,814	222,741
Illinois.....	60	21	39	3,160,647	3,065,486	95,161
Michigan.....	59	23	36	2,249,326	2,089,084	160,242
Wisconsin.....	68	36	33	1,265,589	1,206,325	59,264
WEST NORTH CENTRAL:						
Minnesota.....	77	23	54	706,582	592,606	113,976
Iowa.....	95	24	71	810,287	707,679	102,608
Missouri.....	78	32	44	1,035,704	933,777	101,927
North Dakota.....	26	12	14	99,708	90,351	9,357
South Dakota.....	56	28	28	103,484	80,532	22,952
Nebraska.....	101	25	76	379,431	282,103	97,328
Kansas.....	82	16	66	566,835	400,825	106,010
SOUTH ATLANTIC:						
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	21	12	9	1,168,127	1,145,006	23,121
Virginia.....	25	16	9	573,635	552,372	21,263
West Virginia.....	16	15	1	862,859	862,514	345
North Carolina.....	33	18	15	1,028,143	973,125	55,018
South Carolina.....	15	10	5	959,166	954,486	4,680
Georgia.....	19	8	11	741,205	729,786	11,419
Florida.....	35	10	25	546,615	419,087	127,548
EAST SOUTH CENTRAL:						
Kentucky.....	23	16	7	457,020	436,240	20,780
Tennessee.....	21	13	8	462,264	444,854	17,410
Alabama.....	9	5	4	852,609	847,009	5,600
Mississippi.....	26	5	21	83,178	51,543	31,635
WEST SOUTH CENTRAL:						
Arkansas.....	31	18	13	217,755	194,526	23,229
Louisiana.....	41	15	26	453,284	409,617	43,667
Oklahoma.....	56	14	42	448,572	391,591	56,981
Texas.....	67	30	37	1,298,507	1,212,066	86,441
MOUNTAIN:						
Montana.....	26	22	4	442,425	441,755	670
Idaho.....	17	13	4	352,257	340,009	12,248
Wyoming.....	29	22	7	46,175	43,836	2,339
Colorado.....	46	23	23	317,231	204,128	53,103
New Mexico and Arizona <sup>1</sup> .....	40	36	4	252,077	249,233	2,844
Utah.....	27	9	18	231,291	211,706	18,585
Nevada.....	8	7	1	15,505	15,265	240
PACIFIC:						
Washington.....	25	21	4	1,370,716	835,850	543,866
Oregon.....	27	21	8	548,500	518,705	20,855
California.....	24	18	6	3,694,031	3,066,171	628,460

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 28.—NUMBER OF PRIVATELY OWNED ELECTRIC UTILITIES, BY CHARACTER OF OWNERSHIP, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	PRIVATELY OWNED ELECTRIC UTILITIES			
	Total	Incorpo-	Individual	Firm or partnership
		rated		
UNITED STATES.....	1,340	1,128	164	48
GEOGRAPHIC DIVISIONS:				
New England.....	174	157	17	
Middle Atlantic.....	140	132	5	3
East North Central.....	214	192	15	7
West North Central.....	245	187	46	12
South Atlantic.....	132	116	12	4
East South Central.....	59	56	3	
West South Central.....	93	77	11	5
Mountain.....	178	135	33	10
Pacific.....	105	76	22	7
NEW ENGLAND:				
Maine.....	45	38	7	
New Hampshire.....	22	18	4	
Vermont and Rhode Island <sup>1</sup> .....	38	32	6	
Massachusetts.....	56	56		
Connecticut.....	13	13		
MIDDLE ATLANTIC:				
New York.....	63	57	4	2
New Jersey.....	10	10		
Pennsylvania.....	67	65	1	1
EAST NORTH CENTRAL:				
Ohio.....	46	41	3	2
Indiana.....	43	37	5	1
Illinois.....	38	38		
Michigan.....	31	25	4	2
Wisconsin.....	56	51	3	2
WEST NORTH CENTRAL:				
Minnesota.....	33	22	9	2
Iowa.....	51	47	2	2
Missouri.....	50	41	5	
North Dakota.....	14	13	1	
South Dakota.....	37	19	17	1
Nebraska.....	29	20	7	2
Kansas.....	31	25	5	1
SOUTH ATLANTIC:				
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	20	19	1	
Virginia.....	22	19	2	1
West Virginia.....	30	28	2	
North Carolina.....	24	19	3	2
South Carolina.....	15	13	2	
Georgia.....	9	7	1	1
Florida.....	12	11	1	
EAST SOUTH CENTRAL:				
Kentucky.....	19	19		
Tennessee.....	24	22	2	
Alabama.....	9	9		
Mississippi.....	7	6	1	
WEST SOUTH CENTRAL:				
Arkansas.....	25	20	1	4
Louisiana.....	15	15		
Oklahoma.....	21	17	4	
Texas.....	32	25	6	1
MOUNTAIN:				
Montana.....	27	11	13	3
Idaho.....	22	18	1	3
Wyoming.....	27	21	6	
Colorado.....	32	25	5	2
New Mexico and Arizona <sup>1</sup> .....	45	39	5	1
Utah.....	13	12	1	
Nevada.....	12	9	2	1
PACIFIC:				
Washington.....	42	31	9	2
Oregon.....	27	21	4	2
California.....	36	24	9	3

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 29.—GENERATORS—NUMBER AND KILOWATT CAPACITY, BY TYPE OF PRIME MOVER, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	TOTAL		STEAM ENGINES		STEAM TURBINES		INTERNAL-COMBUSTION ENGINES			HYDROTURBINES AND WATER WHEELS		
	Number	Kilowatts	Number	Kilowatts	Number	Kilowatts	Diesel and semi-Diesel		Other internal-combustion engines		Number	Kilowatts
							Number	Kilowatts	Number	Kilowatts		
UNITED STATES	7,563	32,192,918	528	417,368	2,060	22,824,364	1,564	357,160	271	43,835	3,120	8,570,185
GEOGRAPHIC DIVISIONS:												
New England	708	2,697,236	20	5,416	187	1,753,980	31	4,457	3	175	467	833,208
Middle Atlantic	938	8,594,017	57	83,023	369	7,013,036	20	2,972	23	2,771	524	1,482,215
East North Central	1,250	7,586,745	97	169,550	436	6,785,314	50	11,170	13	1,837	634	618,865
West North Central	1,218	7,281,434	135	39,850	327	1,704,785	49	103,007	43	8,693	454	455,129
South Atlantic	847	3,973,277	46	10,964	227	2,186,319	174	36,648	19	4,286	431	1,755,165
East South Central	413	1,207,244	53	68,239	120	548,755	121	15,512	27	2,607	92	602,131
West South Central	772	1,622,546	46	12,005	199	1,420,201	419	80,075	66	9,234	42	100,971
Mountain	758	1,063,717	69	15,381	106	335,999	238	45,246	69	13,833	296	633,248
Pacific	554	3,146,702	5	2,900	89	1,075,975	62	38,175	8	399	370	2,039,253
NEW ENGLAND:												
Maine	177	234,095	2	340	13	55,300	11	1,435	1	150	150	176,800
New Hampshire	110	267,255	4	441	11	60,250	4	381	---	100	100	236,183
Vermont and Rhode Island <sup>1</sup>	129	385,984	4	770	22	236,750	8	260	2	26	98	148,173
Massachusetts	192	145,717	10	8,865	94	927,690	8	2,375	---	44	44	211,787
Connecticut	91	564,255	---	---	47	473,990	---	---	---	90,265	90,265	90,265
MIDDLE ATLANTIC:												
New York	604	4,672,380	33	80,339	132	3,501,969	14	2,237	1	40	424	1,087,795
New Jersey	357	1,049,150	4	1,035	48	1,047,245	1	1,150	---	4	4	363,720
Pennsylvania	332	2,872,487	20	11,649	189	2,483,822	6	585	22	2,731	96	363,720
EAST NORTH CENTRAL:												
Ohio	1655	2,008,205	20	12,425	128	1,983,780	11	1,773	6	---	17	12,000
Indiana	147	872,881	17	98,745	74	735,700	11	2,226,533	4	2,780	35	35,653
Illinois	1392	2,291,161	36	44,169	117	1,209,013	20	4,785	1	1,610	39	17,631
Michigan	498	1,538,545	4	800	57	1,209,013	20	4,785	1	48	327	323,947
Wisconsin	317	875,953	20	13,411	60	630,288	15	1,841	6	179	216	230,234
WEST NORTH CENTRAL:												
Minnesota	186	433,906	16	4,164	44	301,000	35	6,728	1	120	90	121,893
Iowa	262	528,047	37	12,727	86	367,232	60	22,521	6	2,798	73	122,769
Missouri	105	692,526	15	5,670	70	514,078	87	15,625	1	10	22	157,145
North Dakota	72	665,857	15	5,290	24	57,075	24	3,796	9	736	---	---
South Dakota	125	60,423	4	830	15	36,350	73	13,607	20	2,961	10	4,675
Nebraska	196	201,707	29	4,835	33	164,250	82	19,367	2	1,900	50	11,706
Kansas	132	297,937	19	6,254	65	202,800	86	21,363	4	608	19	6,852

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 29.—GENERATORS—NUMBER AND KILOWATT CAPACITY, BY TYPE OF PRIME MOVER, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937—Continued

DIVISION AND STATE	TOTAL		STEAM ENGINES		STEAM TURBINES		INTERNAL-COMBUSTION ENGINES		HYDROTURBINES AND WATER WHEELS	
	Number	Kilowatts	Number	Kilowatts	Number	Kilowatts	Number	Kilowatts	Number	Kilowatts
SOUTH ATLANTIC:										
Delaware, Maryland, and District of Columbia <sup>1</sup>	79	839,175	3	4,100	38	546,225	27	6,465	11	271,385
Virginia	151	413,250	1	1,180	38	318,500	22	5,054	91	89,516
West Virginia	99	635,678	7	1,170	40	526,740	7	6,041	29	100,980
North Carolina	157	695,646	3	900	21	263,500	12	2,786	99	398,355
South Carolina	128	655,541	10	1,052	15	136,019	7	6,165	96	322,845
Georgia	142	466,654	9	1,150	31	151,675	7	1,054	94	332,741
Florida	161	278,333	13	2,402	44	241,660	93	19,928	11	14,343
EAST SOUTH CENTRAL:										
Kentucky	116	325,489	14	48,162	40	169,025	36	2,197	8	105,185
Tennessee	136	332,347	22	11,138	45	184,395	7	4,471	16	46
Alabama	70	602,338	7	6,880	14	169,000	21	4,595	28	135,053
Mississippi	91	37,070	10	2,059	21	26,335	57	8,249	3	427
WEST SOUTH CENTRAL:										
Arkansas	107	138,392	11	4,060	26	59,600	60	8,026	20	3,186
Louisiana	116	288,249	1	350	22	275,250	73	11,761	20	1,610
Oklahoma	150	292,417	14	4,735	48	273,121	223	50,335	26	4,438
Texas	309	903,458	20	2,920	103	832,230	223	50,335	27	33,066
MOUNTAIN:										
Montana	127	276,734	6	732	8	5,300	27	1,069	16	2,268
Idaho	91	230,462	2	550	23	23,870	9	9,988	70	80
Wyoming	90	31,524	17	2,802	23	122,560	23	1,724	11	1,166
Colorado	149	192,052	23	5,721	38	122,560	41	6,036	12	46
New Mexico and Arizona <sup>1</sup>	210	176,153	19	5,400	32	122,407	113	30,537	33	57,754
Utah	83	146,146	1	36	4	39,760	10	2,033	9	8,002
Nevada	28	10,576	1	150	1	112	15	2,820	2	62
PACIFIC:										
Washington	101	589,359	1	100	17	138,000	21	1,894	2	80
Oregon	124	344,306	4	2,800	25	161,600	13	1,985	4	225
California	239	2,213,057	-	-	47	776,375	28	34,296	2	212

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 30.—GENERATORS—NUMBER AND KILOWATT CAPACITY BY TYPE OF PRIME MOVER, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	TOTAL				STEAM TURBINES				INTERNAL-COMBUSTION ENGINES				HYDROTURBINES AND WATER WHEELS			
	Number	Kilowatts	STEAM ENGINES		Number	Kilowatts	Diesel and semi-Diesel		Number	Kilowatts	Number	Kilowatts				
			Number	Kilowatts			Number	Kilowatts								
UNITED STATES	2,753	2,498,347	292	90,676	562	1,400,608	1,488	350,315	134	23,283	277	634,365				
GEOGRAPHIC DIVISIONS:																
New England:	79	73,471	1	300	21	53,131	18	7,412	1	120	38	12,508				
Middle Atlantic:	136	107,630	11	3,630	47	72,425	48	25,231	15	2,186	15	4,158				
East North Central:	573	563,041	119	36,890	189	45,483	164	44,799	24	4,518	77	25,251				
West North Central:	1,004	439,801	99	37,047	144	243,059	697	139,015	47	7,418	17	13,232				
South Atlantic:	211	179,274	24	4,698	62	148,300	108	26,065	3	224	14	4,657				
East South Central:	107	35,477	13	2,877	29	40,500	61	10,194	---	4	2,060					
West South Central:	378	144,591	15	2,697	36	61,180	287	71,979	37	8,086	3	649				
Mountain:	164	60,201	6	917	14	22,650	88	16,628	7	831	49	19,275				
Pacific:	101	875,861	4	1,620	20	312,950	17	9,116	---	60	552,175					
NEW ENGLAND:																
Maine:	9	982	---	---	---	---	3	112	1	120	5	750				
New Hampshire:	7	1,475	---	---	---	---	4	775	---	---	3	700				
Vermont and Rhode Island <sup>1</sup> :	23	9,050	1	---	1	1,100	1	200	---	---	21	7,500				
Massachusetts:	33	52,212	1	300	17	45,281	9	5,225	---	6	6	1,406				
Connecticut:	7	9,752	---	---	3	6,750	1	1,100	---	---	3	1,902				
MIDDLE ATLANTIC:																
New York:	63	56,595	6	1,280	13	32,000	21	17,897	9	1,260	15	4,158				
New Jersey:	12	11,060	6	2,350	4	8,750	8	2,310	6	926	---	---				
Pennsylvania:	61	39,975	6	2,350	30	31,675	19	6,024	6	926	---	---				
EAST NORTH CENTRAL:																
Ohio:	133	170,895	47	13,282	67	150,450	37	6,923	2	240	---	---				
Indiana:	107	165,250	20	10,919	56	144,675	20	9,469	2	187	---	---				
Illinois:	107	69,516	40	10,385	24	50,411	33	7,992	10	728	---	---				
Michigan:	117	115,403	3	16,634	30	56,635	34	13,933	3	514	47	15,077				
Wisconsin:	89	41,977	9	1,620	12	20,512	31	6,922	7	2,849	30	10,274				
WEST NORTH CENTRAL:																
Minnesota:	155	82,283	38	10,868	36	52,070	68	15,460	5	958	7	2,927				
Iowa:	104	73,701	23	6,151	24	29,337	130	27,287	9	791	8	40,135				
Missouri:	143	73,135	14	3,570	23	42,999	99	25,692	6	844	1	30				
North Dakota:	34	6,290	1	500	2	2,500	31	3,230	---	---	---	---				
South Dakota:	79	16,023	7	3,605	1	1,000	68	10,970	3	448	1	140				
Nebraska:	210	67,423	13	10,733	22	32,283	159	22,406	15	1,862	1	140				
Kansas:	189	120,946	3	1,620	36	82,900	141	33,911	9	2,515	---	---				

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 30.—GENERATORS—NUMBER AND KILOWATT CAPACITY BY TYPE OF PRIME MOVER, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937—Continued

DIVISION AND STATE	TOTAL		STEAM ENGINES		STEAM TURBINES		INTERNAL-COMBUSTION ENGINES			HYDROTURBINES AND WATER WHEELS		
	Number	Kilowatts	Number	Kilowatts	Number	Kilowatts	Diesel and semi-Diesel	Number	Kilowatts	Other internal-combustion engines	Number	Kilowatts
SOUTH ATLANTIC:												
Delaware, Maryland, and District of Columbia <sup>1</sup>	25	16,723	1	240	9	12,700	14	3,730	1	24	8	3,080
Virginia	28	16,768	2	200	7	9,700	13	2,988	2	200	3	660
West Virginia	2	41,281	8	1,453	19	35,350	6	3,935	6	1,375	2	1,125
North Carolina	49	3,300	12	2,330	2	800	6	986	6	1,125	1	192
South Carolina	9	7,238	3	695	3	3,750	51	13,089	51	—	—	—
Georgia	22	94,784	3	695	22	81,000	—	—	—	—	—	—
Florida	76	—	—	—	—	—	—	—	—	—	—	—
EAST SOUTH CENTRAL:												
Kentucky	20	15,704	6	1,237	8	12,875	6	1,652	—	—	4	2,060
Tennessee	23	12,860	2	450	8	9,000	9	1,350	—	—	—	—
Alabama	11	3,858	3	890	3	2,625	5	333	—	—	—	—
Mississippi	53	22,995	2	300	10	16,000	41	6,695	—	—	—	—
WEST SOUTH CENTRAL:												
Arkansas	40	16,144	3	446	11	9,300	16	4,035	10	2,363	—	—
Louisiana	83	30,481	—	—	8	14,080	66	14,437	9	1,914	—	—
Oklahoma	125	39,985	9	1,371	9	11,000	95	25,620	10	1,570	2	424
Texas	130	57,981	3	880	8	26,800	110	27,837	8	2,239	1	225
MOUNTAIN:												
Montana	9	405	—	—	—	—	9	405	—	—	—	—
Idaho	19	8,188	—	—	—	—	6	1,633	—	—	13	6,515
Wyoming	14	1,622	—	—	—	—	10	1,002	3	400	1	160
Colorado	68	34,342	6	917	12	21,650	35	6,254	3	281	12	5,840
New Mexico and Arizona <sup>1</sup>	68	2,184	—	—	2	1,500	7	514	1	150	—	—
Utah	41	13,338	10	—	—	—	18	6,698	—	—	23	6,730
Nevada	3	142	3	—	—	—	3	142	—	—	—	—
PACIFIC:												
Washington	33	412,200	1	290	7	65,000	9	3,036	—	—	26	317,200
Oregon	20	21,616	3	1,420	12	241,950	8	6,050	—	—	9	12,350
California	48	442,045	—	—	—	—	—	—	—	—	25	192,625

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 31.—PRINCIPAL KINDS OF FUEL USED IN ELECTRIC GENERATION, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	PRINCIPAL KINDS OF FUEL USED FOR ELECTRIC GENERATION <sup>1</sup>			
	Coal (tons of 2,000 pounds)		Natural gas (1,000 cubic feet)	
	Anthracite	Bituminous	Fuel oil (barrels of 42 gallons)	
UNITED STATES.....	1,930,223	37,816,260	11,274,247	146,822,867
<b>GEOGRAPHIC DIVISIONS:</b>				
New England.....		2,078,298	2,856,916	-----
Middle Atlantic.....	1,852,512	10,757,303	3,159,672	3,089,063
East North Central.....		16,512,226	53,505	13,221,005
West North Central.....		2,046,384	499,286	29,428,831
South Atlantic.....	20,366	3,399,615	2,210,132	3,657,812
East South Central.....	5,219	1,123,195	54,337	6,076,823
West South Central.....	44,223	241,025	368,750	75,046,860
Mountain.....	7,903	745,100	404,575	6,006,810
Pacific.....		13,123	1,667,694	10,295,663
<b>NEW ENGLAND:</b>				
Maine.....		12,104	120,074	-----
New Hampshire.....		12,481	115,342	-----
Vermont and Rhode Island <sup>2</sup> .....		45,478	1,769,505	-----
Massachusetts.....		1,324,064	175,157	-----
Connecticut.....		684,111	676,238	-----
<b>MIDDLE ATLANTIC:</b>				
New York.....	16,280	5,252,201	275,344	11,535
New Jersey.....	42,375	1,305,693	2,874,931	-----
Pennsylvania.....	1,703,857	4,199,400	9,397	3,077,528
<b>EAST NORTH CENTRAL:</b>				
Ohio.....		5,077,443	184	1,916,932
Indiana.....		2,169,695	1,170	7,863,656
Illinois.....		5,899,085	38,534	3,440,417
Michigan.....		2,259,593	2,851	-----
Wisconsin.....		1,106,410	12,766	-----
<b>WEST NORTH CENTRAL:</b>				
Minnesota.....		492,393	24,263	666,407
Iowa.....		900,314	127,248	4,453,825
Missouri.....		712,456	60,901	6,105,751
North Dakota.....		331,911	14,392	-----
South Dakota.....		87,135	59,294	969,137
Nebraska.....		289,123	106,009	2,811,191
Kansas.....		133,052	107,159	14,392,520
<b>SOUTH ATLANTIC:</b>				
Delaware, Maryland, and District of Columbia <sup>2</sup> .....		771,355	9,965	-----
Virginia.....		797,851	20,599	-----
West Virginia.....	20,366	1,480,380	932	62,136
North Carolina.....		203,376	7,492	-----
South Carolina.....		126,635	970	-----
Georgia.....		20,018	257,427	3,595,676
Florida.....			1,912,747	-----
<b>EAST SOUTH CENTRAL:</b>				
Kentucky.....		571,694	9,561	9,500
Tennessee.....		316,136	14,521	4,895,716
Alabama.....		235,072	8,871	-----
Mississippi.....	5,219	293	21,384	1,171,607
<b>WEST SOUTH CENTRAL:</b>				
Arkansas.....		15,547	20,072	2,569,533
Louisiana.....			146,832	21,760,751
Oklahoma.....	44,223	225,478	25,171	8,688,992
Texas.....			176,675	42,027,584
<b>MOUNTAIN:</b>				
Montana.....		3,635	5,268	688,450
Idaho.....		10	3,327	-----
Wyoming.....		84,424	7,032	420,231
Colorado.....	7,903	465,157	25,714	4,084
New Mexico and Arizona <sup>2</sup> .....		27,323	350,059	4,892,307
Utah.....		104,551	4,849	1,733
Nevada.....			8,326	-----
<b>PACIFIC:</b>				
Washington.....		13,123	546,805	-----
Oregon.....			577,141	-----
California.....			543,058	10,295,663

<sup>1</sup> In addition, 84,529 tons of coke and 997 barrels of gasoline were reported. Manufactured gas, hogged fuel, and sawmill and other waste were also reported.<sup>2</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 32.—PRINCIPAL KINDS OF FUEL USED IN ELECTRIC GENERATION, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	PRINCIPAL KINDS OF FUEL USED FOR ELECTRIC GENERATION <sup>1</sup>			
	Coal (tons of 2,000 pounds)		Fuel oil (barrels of 42 gallons)	
	Anthracite	Bituminous		
United States.....	93,272	2,127,906	2,588,367	12,630,384
GEOGRAPHIC DIVISIONS:				
New England.....		41,443	200,075	
Middle Atlantic.....	15,649	133,434	101,551	35,703
East North Central.....		1,139,235	212,918	3,106
West North Central.....	18,748	539,090	704,315	2,720,558
South Atlantic.....		136,130	669,720	7,500
East South Central.....	58,875	93,757	50,449	212,120
West South Central.....		13,065	372,146	3,237,289
Mountain.....		26,874	48,977	499,438
Pacific.....		4,878	228,216	5,914,070
NEW ENGLAND:				
Maine.....			471	
New Hampshire.....			2,888	
Vermont and Rhode Island <sup>2</sup> .....			370	
Massachusetts.....		41,443	154,012	
Connecticut.....			42,334	
MIDDLE ATLANTIC:				
New York.....		55,955	65,311	28,040
New Jersey.....		12,497	11,665	
Pennsylvania.....	15,649	64,982	24,575	8,763
EAST NORTH CENTRAL:				
Ohio.....		480,975	30,887	3,106
Indiana.....		321,602	47,550	
Illinois.....		152,044	44,288	
Michigan.....		145,448	46,128	
Wisconsin.....		39,166	44,065	
WEST NORTH CENTRAL:				
Minnesota.....	3,390	126,852	88,691	633,718
Iowa.....	2,000	106,912	121,645	
Missouri.....	321	80,490	158,811	
North Dakota.....		10,476	12,376	
South Dakota.....		19,772	56,835	20,000
Nebraska.....	13,037	48,172	107,899	73,219
Kansas.....		146,416	158,058	1,993,621
SOUTH ATLANTIC:				
Delaware, Maryland, and District of Columbia <sup>1</sup> .....		23,416	16,864	
Virginia.....		34,210	15,819	
West Virginia.....				7,500
North Carolina.....		64,736	23,975	
South Carolina.....			4,500	
Georgia.....		13,768	5,085	
Florida.....			603,477	
EAST SOUTH CENTRAL:				
Kentucky.....	58,875	28,704	5,956	
Tennessee.....		29,445	8,874	
Alabama.....		16,600	1,856	
Mississippi.....		19,005	33,763	212,120
WEST SOUTH CENTRAL:				
Arkansas.....		12,715	31,559	153,414
Louisiana.....			79,758	909,365
Oklahoma.....			350	911,969
Texas.....			130,720	1,282,541
MOUNTAIN:				
Montana.....			2,327	
Idaho.....			1,509	
Wyoming.....			4,888	16,143
Colorado.....		22,174	23,053	468,534
New Mexico and Arizona <sup>2</sup> .....		4,700	2,448	14,761
Utah.....			13,510	
Nevada.....			1,272	
PACIFIC:				
Washington.....			97,332	
Oregon.....			16,722	
California.....		4,878	114,162	5,914,670

<sup>1</sup> In addition, 3,600 tons of coke, 1,427 barrels of gasoline, and 158,814,000 cubic feet of manufactured gas were reported.

<sup>2</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 38.—NUMBER OF GENERATING STATIONS, BY TYPE, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	NUMBER OF GENERATING STATIONS										
	Privately owned electric utilities				Municipally owned electric utilities						
	Total	Steam	Internal combustion	Water	Total	Steam	Internal combustion	Water	Composite <sup>1</sup>	Total	
UNITED STATES.....	3,879	1,070	1,271	1,346	192	2,916	813	748	1,226	129	963
GEOGRAPHIC DIVISIONS:											
New England.....	310	55	14	221	20	277	50	8	202	17	33
Middle Atlantic.....	376	134	23	204	16	336	116	10	197	13	40
East North Central.....	629	253	74	269	33	426	154	19	237	16	203
West North Central.....	856	220	477	113	46	503	147	222	108	26	353
South Atlantic.....	303	117	114	148	14	329	99	78	143	9	73
East South Central.....	208	82	91	32	3	170	68	68	31	3	38
West South Central.....	451	99	318	24	10	334	84	222	24	4	117
Mountain.....	378	65	129	145	39	305	59	95	120	31	73
Pacific.....	278	45	31	190	12	236	36	26	164	10	42
NEW ENGLAND:											
Maine.....	78	6	62	4	72	6	4	58	4	6	6
New Hampshire.....	60	4	50	4	57	4	1	48	4	3	3
Vermont and Rhode Island.....	76	7	2	61	6	62	6	2	49	5	14
Massachusetts.....	68	28	3	28	4	66	24	1	28	3	7
Connecticut.....	33	10	1	20	2	30	10	-	19	1	3
MIDDLE ATLANTIC:											
New York.....	229	46	6	167	10	211	41	2	160	8	18
New Jersey.....	22	15	3	2	18	14	-	2	2	4	5
Pennsylvania.....	125	73	14	35	3	107	61	8	35	3	18
EAST NORTH CENTRAL:											
Ohio.....	106	85	12	9	54	46	-	8	-	52	39
Indiana.....	88	65	16	16	1	55	33	5	16	1	33
Illinois.....	87	57	14	8	8	48	34	1	8	5	39
Michigan.....	172	27	15	119	11	126	18	6	101	1	46
Wisconsin.....	176	29	17	117	13	143	23	7	104	9	33
WEST NORTH CENTRAL:											
Minnesota.....	135	44	42	38	11	79	23	18	35	3	56
Iowa.....	176	54	84	80	8	106	39	35	28	4	70
Missouri.....	119	34	73	7	5	75	24	43	7	1	44
North Dakota.....	47	15	31	1	1	32	14	17	1	15	1
South Dakota.....	80	8	64	3	5	52	6	39	3	4	14
Nebraska.....	163	30	93	27	13	89	19	33	27	10	74
Kansas.....	136	35	90	8	3	70	22	8	3	66	13

<sup>1</sup> Stations having more than 1 type of prime mover.

<sup>2</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 33.—NUMBER OF GENERATING STATIONS, BY TYPE, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937—Continued

DIVISION AND STATE	NUMBER OF GENERATING STATIONS						Municipally owned electric utilities			
	Total			Privately owned electric utilities			Total	Steam	Internal-combus-tion	Water
	Total	Steam	Internal-combus-tion	Total	Steam	Internal-combus-tion				
<b>SOUTH ATLANTIC:</b>										
Delaware, Maryland, and District of Columbia	35	15	16	3	27	12	3	8	3	1
Virginia	62	12	16	32	2	63	11	30	1	1
West Virginia	36	14	9	11	2	35	14	8	1	2
North Carolina	78	16	12	46	4	63	10	45	3	1
South Carolina	37	11	4	22	—	35	11	3	6	1
Georgia	60	22	6	30	2	63	19	21	2	1
Florida	86	27	51	4	3	63	22	35	4	1
<b>EAST SOUTH CENTRAL:</b>										
Kentucky	47	24	18	5	41	19	17	5	6	1
Tennessee	60	27	13	18	2	53	10	17	2	1
Alabama	34	12	13	9	—	30	10	11	9	2
Mississippi	67	19	47	—	1	46	15	30	—	17
<b>WEST SOUTH CENTRAL:</b>										
Louisiana	63	15	40	5	30	52	35	5	1	7
Oklahoma	76	9	67	4	38	20	35	2	1	22
Texas	212	50	142	17	3	174	46	106	17	34
<b>MOUNTAIN:</b>										
Montana	46	6	17	18	5	42	6	13	5	4
Idaho	49	2	6	38	3	39	2	3	31	3
Wyoming	42	13	17	8	4	35	13	11	4	7
Colorado	87	25	29	21	12	61	20	16	18	6
New Mexico and Arizona <sup>2</sup>	76	17	45	6	7	72	16	43	6	13
Utah	65	2	9	47	7	43	2	4	7	3
Nevada	14	—	6	7	1	13	—	5	7	1
<b>PACIFIC:</b>										
Washington	68	12	10	42	4	55	9	10	33	3
Oregon	69	12	10	42	5	59	11	7	37	4
California	141	21	11	106	3	122	16	94	19	5

<sup>1</sup> Stations having more than 1 type of prime mover.  
<sup>2</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 34.—CURRENT GENERATED, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	GENERATED OUTPUT (kilowatt-hours)			PERCENT OF TOTAL	
	Total	Privately owned electric utilities	Municipally owned electric utilities	Privately owned electric utilities	Municipally owned electric utilities
UNITED STATES.....	115,173,469,769	109,919,648,965	5,253,820,804	95.4	4.6
GEOGRAPHIC DIVISIONS:					
New England.....	7,337,100,559	7,202,416,066	134,684,493	98.2	1.8
Middle Atlantic.....	29,354,300,369	29,141,712,858	212,587,511	99.3	.7
East North Central.....	28,138,472,141	26,946,074,035	1,192,398,106	95.8	4.2
West North Central.....	7,544,568,848	6,735,777,155	808,791,093	89.3	10.7
South Atlantic.....	13,654,846,086	13,284,285,149	370,561,537	97.3	2.7
East South Central.....	4,594,337,317	4,491,848,648	102,488,669	97.8	2.2
West South Central.....	6,390,671,507	6,096,380,250	294,291,257	95.4	4.6
Mountain.....	4,001,229,182	3,879,005,483	122,223,699	96.9	3.1
Pacific.....	14,157,943,160	12,142,149,321	2,015,793,839	85.8	14.2
NEW ENGLAND:					
Maine.....	846,864,562	844,675,822	2,188,740	99.7	.3
New Hampshire.....	760,062,968	756,818,768	3,244,200	99.6	.4
Vermont and Rhode Island <sup>1</sup> .....	1,264,366,503	1,244,943,546	19,522,057	98.5	1.5
Massachusetts.....	2,827,539,613	2,735,439,187	92,100,426	96.7	3.3
Connecticut.....	1,638,266,913	1,620,638,743	17,028,170	98.9	1.1
MIDDLE ATLANTIC:					
New York.....	15,237,827,309	15,108,409,869	120,417,440	99.2	.8
New Jersey.....	3,680,758,732	3,664,190,582	16,568,150	99.5	.5
Pennsylvania.....	10,435,714,328	10,369,112,407	66,601,921	99.4	.6
EAST NORTH CENTRAL:					
Ohio.....	8,070,468,170	7,644,496,786	425,971,384	94.7	5.3
Indiana.....	3,735,986,519	3,448,724,051	287,262,468	92.3	7.7
Illinois.....	7,862,655,162	7,739,941,900	122,713,262	98.4	1.6
Michigan.....	5,773,614,150	5,516,072,594	257,541,556	95.5	4.5
Wisconsin.....	2,695,748,140	2,596,838,704	98,909,436	98.3	3.7
WEST NORTH CENTRAL:					
Minnesota.....	1,480,651,017	1,344,438,718	136,212,299	90.8	9.2
Iowa.....	1,878,529,327	1,760,583,372	117,945,955	93.7	6.3
Missouri.....	1,870,732,341	1,749,469,089	121,263,252	93.5	6.5
North Dakota.....	200,840,952	191,406,064	9,434,888	95.3	4.7
South Dakota.....	144,556,303	110,125,524	34,430,779	76.2	23.8
Nebraska.....	703,184,833	600,573,465	102,591,368	85.4	14.6
Kansas.....	1,266,094,075	979,180,923	286,913,152	77.3	22.7
SOUTH ATLANTIC:					
Delaware, Maryland and District of Columbia <sup>1</sup> .....	2,965,672,767	2,934,126,609	31,546,158	98.9	1.1
Virginia.....	1,609,785,137	1,563,079,397	46,705,740	97.1	2.9
West Virginia.....	2,829,419,710	2,829,104,710	315,000	100.0	(2)
North Carolina.....	1,875,440,178	1,805,017,016	70,423,162	96.2	3.8
South Carolina.....	1,723,076,410	1,715,701,010	7,375,400	99.6	.4
Georgia.....	1,736,245,181	1,723,504,372	12,740,809	99.3	.7
Florida.....	915,207,303	713,752,035	201,455,268	78.0	22.0
EAST SOUTH CENTRAL:					
Kentucky.....	891,911,387	858,188,861	33,722,506	96.2	3.8
Tennessee.....	1,265,926,949	1,240,713,088	25,213,861	98.0	2.0
Alabama.....	2,358,841,978	2,347,207,352	11,634,624	99.5	.5
Mississippi.....	77,657,025	45,730,347	31,917,678	58.9	41.1
WEST SOUTH CENTRAL:					
Arkansas.....	262,490,696	237,663,446	24,827,250	90.5	9.5
Louisiana.....	1,688,130,981	1,622,399,405	65,731,576	96.1	3.9
Oklahoma.....	1,104,780,421	1,025,025,885	79,754,536	92.8	7.2
Texas.....	3,335,289,409	3,211,291,514	123,977,895	96.3	3.7
MOUNTAIN:					
Montana.....	1,317,721,752	1,317,194,279	527,473	100.0	(2)
Idaho.....	875,534,432	854,298,044	21,236,388	97.6	2.4
Wyoming.....	79,422,969	75,745,099	3,677,870	95.4	4.6
Colorado.....	676,053,210	614,634,913	61,418,297	90.9	9.1
New Mexico and Arizona <sup>1</sup> .....	493,011,212	489,007,793	4,003,419	99.2	.8
Utah.....	514,560,792	483,528,326	31,032,466	94.0	6.0
Nevada.....	44,924,815	44,597,029	327,786	99.3	.7
PACIFIC:					
Washington.....	3,665,062,079	2,854,975,261	810,086,818	77.9	22.1
Oregon.....	1,374,200,235	1,316,783,493	57,416,742	95.8	4.2
California.....	9,118,680,846	7,970,390,567	1,148,290,279	87.4	12.6

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.<sup>2</sup> Less than 1/10 of 1 percent.

TABLE 35.—CURRENT GENERATED, BY TYPE OF PRIME MOVER, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	Total (kilowatt-hours)	KILOWATT-HOURS GENERATED BY—		
		Steam	Water	Internal combustion
		70,716,166,932	38,807,074,099	396,407,934
UNITED STATES.....	108,919,648,965			
GEOGRAPHIC DIVISIONS:				
New England.....	7,202,416,066	4,062,308,318	3,132,550,993	7,556,755
Middle Atlantic.....	29,141,712,858	20,974,155,728	8,147,026,886	530,246
East North Central.....	26,946,074,035	24,570,201,175	2,364,472,545	11,400,315
West North Central.....	6,735,777,155	4,719,328,835	1,843,357,253	173,061,064
South Atlantic.....	13,284,285,149	6,403,931,476	6,845,604,462	34,659,211
East South Central.....	4,491,848,648	1,476,395,788	2,999,937,830	15,515,030
West South Central.....	6,096,380,250	5,802,973,357	246,441,217	46,985,676
Mountain.....	3,379,005,483	1,094,291,684	2,690,957,593	93,756,206
Pacific.....	12,142,149,321	1,612,580,573	10,516,605,317	12,963,431
NEW ENGLAND:				
Maine.....	844,675,822	47,068,163	796,050,514	1,557,145
New Hampshire.....	756,818,768	55,181,234	701,572,863	64,671
Vermont and Rhode Island <sup>1</sup> .....	1,244,843,546	638,592,846	605,972,090	278,610
Massachusetts.....	2,735,439,187	2,063,991,305	663,791,553	5,656,329
Connecticut.....	1,620,638,743	1,255,474,770	365,163,973	-----
MIDDLE ATLANTIC:				
New York.....	15,108,409,869	8,956,766,883	6,151,222,632	420,354
New Jersey.....	3,664,190,582	3,662,048,192	2,142,390	-----
Pennsylvania.....	10,369,112,407	8,355,340,651	2,013,661,864	109,892
EAST NORTH CENTRAL:				
Ohio.....	7,644,496,786	7,607,193,205	37,303,581	-----
Indiana.....	3,448,724,051	3,299,886,028	148,475,956	362,067
Illinois.....	7,739,941,900	7,650,274,408	82,279,942	7,387,550
Michigan.....	5,516,072,594	4,290,400,557	1,224,997,663	674,374
Wisconsin.....	2,596,838,704	1,722,446,977	871,415,403	2,976,324
WEST NORTH CENTRAL:				
Minnesota.....	1,344,438,718	842,629,817	492,814,108	8,904,793
Iowa.....	1,760,583,372	1,005,996,995	709,056,383	45,529,994
Missouri.....	1,749,469,089	1,157,401,337	579,965,589	12,102,163
North Dakota.....	191,406,064	186,163,456	-----	5,242,608
South Dakota.....	110,125,524	77,663,015	9,031,300	23,431,209
Nebraska.....	600,573,465	531,364,182	30,746,950	38,462,333
Kansas.....	978,180,923	918,110,033	21,772,926	39,297,964
SOUTH ATLANTIC:				
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	2,034,126,609	1,305,131,149	1,625,602,787	3,392,673
Virginia.....	1,563,079,397	1,174,912,221	380,171,861	7,995,315
West Virginia.....	2,829,104,710	2,463,350,081	364,654,720	1,099,900
North Carolina.....	1,805,017,016	336,822,984	1,462,249,691	2,944,341
South Carolina.....	1,715,701,010	130,983,371	1,584,506,028	211,611
Georgia.....	1,723,504,372	343,522,950	1,379,808,616	82,806
Florida.....	713,752,035	646,208,720	48,610,750	18,932,565
EAST SOUTH CENTRAL:				
Kentucky.....	855,188,861	547,248,364	308,298,270	2,642,218
Tennessee.....	1,240,713,088	549,069,228	690,756,838	887,022
Alabama.....	2,347,207,352	344,199,052	2,000,882,713	2,125,587
Mississippi.....	46,739,347	33,870,144	-----	9,860,203
WEST SOUTH CENTRAL:				
Arkansas.....	237,663,446	93,027,725	139,462,048	5,173,673
Louisiana.....	1,622,399,405	1,611,133,740	-----	11,265,665
Oklahoma.....	1,025,025,885	1,015,527,473	1,046,745	8,451,667
Texas.....	3,211,291,514	3,083,284,419	105,932,424	22,074,671
MOUNTAIN:				
Montana.....	1,317,194,279	17,813,965	1,294,790,051	4,590,263
Idaho.....	854,298,044	8,243	853,374,090	915,711
Wyoming.....	75,745,099	70,982,598	3,234,916	1,527,585
Colorado.....	614,634,913	410,023,740	104,441,154	10,170,019
New Mexico and Arizona <sup>1</sup> .....	480,007,793	383,660,738	33,987,113	71,359,942
Utah.....	483,593,326	211,802,400	270,093,143	1,632,783
Nevada.....	44,597,029	-----	41,037,126	3,559,903
PACIFIC:				
Washington.....	2,854,975,261	370,783,057	2,482,655,141	1,537,063
Oregon.....	1,316,783,493	359,660,273	955,152,736	1,970,484
California.....	7,970,390,587	882,137,243	7,078,707,440	9,455,884

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 36.—CURRENT GENERATED, BY TYPE OF PRIME MOVER, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	Total (kilowatt-hours)	KILOWATT-HOURS GENERATED BY—		
		Steam	Water	Internal combustion
		2,675,394,395	1,900,094,562	678,331,847
UNITED STATES.....	5,253,820,804			
GEOGRAPHIC DIVISIONS:				
New England.....	134,684,493	82,638,545	39,190,977	12,854,971
Middle Atlantic.....	212,587,511	133,335,289	37,064,667	42,187,555
East North Central.....	1,192,395,106	1,011,035,351	91,472,613	89,890,142
West North Central.....	808,791,693	544,671,121	21,956,712	242,163,860
South Atlantic.....	370,561,537	301,570,443	25,423,023	43,568,071
East South Central.....	102,488,669	80,739,155	3,179,776	18,569,738
West South Central.....	294,291,257	123,089,978	2,348,288	167,952,991
Mountain.....	122,223,699	35,690,511	67,306,059	19,218,129
Pacific.....	2,015,793,839	361,715,002	1,612,152,447	41,926,390
NEW ENGLAND:				
Maine.....	2,188,740		2,058,400	130,340
New Hampshire.....	3,244,200		2,025,000	1,219,200
Vermont and Rhode Island <sup>1</sup> .....	19,522,957	39,300	19,474,257	9,400
Massachusetts.....	92,100,426	74,332,575	6,271,820	11,496,031
Connecticut.....	17,628,170	8,266,670	9,361,500	
MIDDLE ATLANTIC:				
New York.....	129,417,440	61,626,888	37,064,667	30,725,885
New Jersey.....	16,568,150	11,989,994		4,578,156
Pennsylvania.....	66,601,921	59,718,407		6,883,514
EAST NORTH CENTRAL:				
Ohio.....	425,971,384	413,539,599		12,431,785
Indiana.....	287,262,468	264,591,925		22,670,543
Illinois.....	122,713,262	105,384,237		17,329,025
Michigan.....	257,541,556	193,838,864	45,025,970	18,676,722
Wisconsin.....	98,909,436	33,680,726	46,446,043	18,782,067
WEST NORTH CENTRAL:				
Minnesota.....	136,212,299	107,482,609	5,930,757	22,708,933
Iowa.....	117,945,955	56,798,802	15,635,055	45,511,198
Missouri.....	121,263,252	70,857,288	30,000	50,375,964
North Dakota.....	9,434,888	5,170,958		4,263,930
South Dakota.....	34,430,779	11,198,730		23,232,049
Nebraska.....	102,591,368	68,283,047	360,000	33,948,321
Kansas.....	286,913,152	224,879,687		62,033,465
SOUTH ATLANTIC:				
Delaware, Maryland, and District of Columbia <sup>1</sup> .....	31,546,158	24,577,500		6,968,658
Virginia.....	46,706,740	21,935,692	18,823,750	5,946,298
West Virginia.....	315,000			315,000
North Carolina.....	70,423,162	60,899,194	1,217,873	8,306,095
South Carolina.....	7,375,400		4,721,000	2,664,400
Georgia.....	12,740,809	10,943,127	660,400	1,137,282
Florida.....	201,455,268	183,214,930		18,240,338
EAST SOUTH CENTRAL:				
Kentucky.....	33,722,506	31,229,021		2,493,485
Tennessee.....	25,213,861	17,990,095	3,179,776	4,043,990
Alabama.....	11,634,624	10,915,349		710,275
Mississippi.....	31,917,678	20,604,690		11,312,988
WEST SOUTH CENTRAL:				
Arkansas.....	24,827,250	12,084,990		12,742,260
Louisiana.....	65,731,576	28,432,800		37,295,776
Oklahoma.....	79,754,536	27,464,683	630,088	51,659,765
Texas.....	123,977,895	56,007,505	1,718,200	66,252,190
MOUNTAIN:				
Montana.....	527,473			527,473
Idaho.....	21,236,388		20,650,688	585,700
Wyoming.....	3,677,870		1,268,160	2,409,710
Colorado.....	61,418,297	32,850,832	19,792,726	8,763,739
New Mexico and Arizona <sup>1</sup> .....	4,003,419	2,839,679		1,163,740
Utah.....	31,032,466		25,504,485	5,437,981
Nevada.....	327,786			327,786
PACIFIC:				
Washington.....	810,086,818	24,357,234	785,729,584	
Oregon.....	57,416,742	366,000	50,435,352	6,615,390
California.....	1,148,290,279	336,991,768	775,987,511	35,311,000

<sup>1</sup> Combined to avoid disclosing the operations of individual establishments.

TABLE 37.—TRANSMISSION SYSTEMS AND PRIMARY DISTRIBUTION LINES—MILES OF CIRCUIT FOR SPECIFIED VOLTAGES,<sup>1</sup> PRIVATELY OWNED ELECTRIC UTILITIES, BY GEOGRAPHIC DIVISIONS: 1937

	Establishments reporting transmission systems and primary distribution lines	MILES OF CIRCUIT BY INDIVIDUAL VOLTAGE					
		Total	220,000	132,000	110,000	66,000	60,000
UNITED STATES	1,100	415,897	2,023	9,361	17,861	30,994	5,288
<b>GEOGRAPHIC DIVISIONS:</b>							
New England	147	30,147	253	-----	879	1,901	-----
Middle Atlantic	118	63,297	370	1,031	3,933	3,287	639
East North Central	179	86,324	4	4,880	581	5,929	-----
West North Central	179	65,484	1	823	485	2,477	520
South Atlantic	114	48,522	129	1,094	4,186	3,936	56
East South Central	56	17,429	-----	84	2,932	1,078	2
West South Central	76	41,183	-----	639	1,289	7,590	2,598
Mountain	144	25,543	-----	752	464	574	715
Pacific	87	37,968	1,266	58	3,132	4,222	758
		44,000	33,000	22,000	13,200	11,000	6,600
UNITED STATES	15,210	45,881	21,198	35,179	29,301	48,532	39,793
<b>GEOGRAPHIC DIVISIONS:</b>							
New England	403	1,999	1,102	944	1,012	1,577	3,610
Middle Atlantic	1,281	4,674	5,338	5,510	3,055	1,928	10,564
East North Central	1,086	12,126	2,765	4,131	2,804	9,507	9,384
West North Central	236	14,486	3,632	10,298	3,658	15,310	33,127
South Atlantic	4,505	2,420	2,322	4,127	1,923	8,587	2,258
East South Central	3,765	1,749	639	2,638	353	1,055	84
West South Central	83	5,621	2,927	5,321	1,754	1,691	5,551
Mountain	3,851	1,597	1,256	1,282	4,084	3,569	1,475
Pacific	-----	1,209	1,217	928	10,658	5,308	4,900
		115,276	115,276	115,276	115,276	115,276	115,276

<sup>1</sup> Other voltages not specifically called for on the schedule are not shown in this table. A large part of "All other" individual voltages shown for table 11 were reported by privately owned electric utilities.

TABLE 38.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY CLASS OF SERVICE, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES: 1937

CLASS OF SERVICE	Total	Privately owned electric utilities	Municipally owned electric utilities
		NUMBER OF CUSTOMERS	
Sales to ultimate consumers, total	27,089,882	24,432,724	2,656,958
Residential or domestic sales:			
Farm	588,292	556,244	32,048
Nonfarm	21,540,429	19,365,677	2,174,752
Rural—distinct rural rates only:			
Farm	505,069	478,011	27,058
Nonfarm	168,086	155,586	12,500
Commercial and industrial sales:			
Farm	60,529	59,127	1,402
Nonfarm	4,130,812	3,731,207	399,605
Public street and highway lighting	23,033	20,736	2,297
Other sales to public authorities	69,262	63,700	5,562
Sales to railroads and railways:			
Street and interurban railways	469	324	71
Electrified steam-railroad divisions	74	74	74
Interdepartmental	1,410	205	1,205
Other sales to ultimate consumers	2,291	1,833	458

TABLE 38.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY CLASS OF SERVICE, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES: 1937—Continued

CLASS OF SERVICE	Total	Privately owned electric utilities	Municipally owned electric utilities
CURRENT SOLD (kilowatt-hours)			
Sales to ultimate consumers, total.....	99,198,412,660	93,524,013,857	5,674,398,803
Residential or domestic sales:			
Farm.....	628,036,382	603,285,669	24,750,713
Nonfarm.....	16,769,276,170	14,921,015,856	1,848,260,314
Rural—distinct rural rates only:			
Farm.....	959,317,994	938,650,264	20,667,730
Nonfarm.....	302,556,863	287,311,102	15,245,761
Commercial and industrial sales:			
Farm.....	936,574,701	923,615,680	12,959,021
Nonfarm.....	68,724,014,300	65,609,765,476	3,114,248,824
Public street and highway lighting.....	1,853,000,318	1,582,911,433	270,088,885
Other sales to public authorities.....	2,370,685,870	2,202,021,370	168,664,500
Sales to railroads and railways:			
Street and interurban railways.....	6,185,717,816	{ 4,748,354,371 1,392,515,497 }	44,847,948
Electrified steam-railroad divisions.....	336,381,497	194,706,812	141,614,685
Interdepartmental.....	132,850,749	119,800,327	13,050,422
CURRENT SOLD PER CUSTOMER (kilowatt-hours)			
Sales to ultimate consumers, total.....	3,662	3,528	2,136
Residential or domestic sales:			
Farm.....	1,068	1,085	772
Nonfarm.....	779	770	850
Rural—distinct rural rates only:			
Farm.....	1,899	1,904	764
Nonfarm.....	1,800	1,847	1,220
Commercial and industrial sales:			
Farm.....	15,473	15,621	9,243
Nonfarm.....	16,637	17,584	7,793
Public street and highway lighting.....	80,450	76,336	117,583
Other sales to public authorities.....	34,228	34,569	30,324
Sales to railroads and railways:			
Street and interurban railways.....	13,189,164	{ 14,655,415 18,817,777 }	631,661
Electrified steam-railroad divisions.....	238,568	950,082	117,523
Interdepartmental.....	57,988	65,358	28,494
REVENUE FROM ELECTRIC SERVICE			
Sales to ultimate consumers, total.....	\$2,156,477,948	\$2,006,933,408	\$149,544,540
Residential or domestic sales:			
Farm.....	23,825,932	22,736,263	1,089,669
Nonfarm.....	724,858,183	654,736,938	70,071,245
Rural—distinct rural rates only:			
Farm.....	30,299,295	29,274,048	1,025,247
Nonfarm.....	10,375,318	9,697,971	677,347
Commercial and industrial sales:			
Farm.....	14,365,684	14,096,245	269,439
Nonfarm.....	1,184,379,772	1,120,173,017	64,206,755
Public street and highway lighting.....	72,510,667	65,536,685	6,974,002
Other sales to public authorities.....	36,990,948	34,259,761	2,731,187
Sales to railroads and railways:			
Street and interurban railways.....	53,576,196	{ 40,914,668 12,148,314 }	513,214
Electrified steam-railroad divisions.....	3,955,748	2,126,726	1,829,022
Interdepartmental.....	1,340,205	1,182,792	157,413
Other sales to ultimate consumers.....			

TABLE 38.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY CLASS OF SERVICE, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES: 1937—Continued

CLASS OF SERVICE	Total	Privately owned electric utilities	Municipally owned electric utilities
REVENUE PER CUSTOMER			
Sales to ultimate consumers, total-----	\$80	\$82	\$56
Residential or domestic sales:			
Farm-----	41	41	34
Nonfarm-----	34	34	32
Rural—distinct rural rates only:			
Farm-----	60	61	38
Nonfarm-----	62	62	54
Commercial and industrial sales:			
Farm-----	237	238	192
Nonfarm-----	287	300	161
Public street and highway lighting-----	3,148	3,161	3,036
Other sales to public authorities-----	534	538	491
Sales to railroads and railways:			
Street and interurban railways-----	114,235	{ 126,280	7,228
Electrified steam-railroad divisions-----		164,166 }	
Interdepartmental-----	2,805	10,374	1,518
Other sales to ultimate consumers-----	585	645	344
REVENUE PER KILOWATT-HOUR ( <i>cents</i> )			
Sales to ultimate consumers, total-----	2.2	2.1	2.6
Residential or domestic sales:			
Farm-----	3.8	3.8	4.4
Nonfarm-----	4.3	4.4	3.8
Rural—distinct rural rates only:			
Farm-----	3.2	3.1	5.0
Nonfarm-----	3.4	3.4	4.4
Commercial and industrial sales:			
Farm-----	1.5	1.5	2.1
Nonfarm-----	1.7	1.7	2.1
Public street and highway lighting-----	3.9	4.1	2.6
Other sales to public authorities-----	1.6	1.6	1.6
Sales to railroads and railways:			
Street and interurban railways-----	.9	{ .9	1.1
Electrified steam-railroad divisions-----		.9 }	
Interdepartmental-----	1.2	1.1	1.3
Other sales to ultimate consumers-----	1.0	1.0	1.2

TABLE 33A.—SALES FOR RESALE—NUMBER OF CUSTOMERS, CURRENT SOLD AND REVENUE FROM ELECTRIC SERVICE BY CLASS OF SERVICE, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES: 1937

CLASS OF SERVICE	Total	Privately owned electric utilities	Municipally owned electric utilities
NUMBER OF CUSTOMERS			
Sales for resale, total.....	2,851	2,541	310
Sales to other electric utilities:			
Municipal distribution systems.....	1,054	941	113
Mutual or cooperative undertakings.....	158	70	82
Other electric companies.....	1,601	1,513	88
Other sales for resale.....	38	11	27
CURRENT SOLD ( <i>kilowatt hours</i> )			
Sales for resale, total.....	27,563,520,916	26,888,055,270	675,465,646
Sales to other electric utilities:			
Municipal distribution systems.....	1,273,156,563	1,252,231,837	20,924,726
Mutual or cooperative undertakings.....	40,794,929	6,031,884	34,763,045
Other electric companies.....	26,193,853,311	25,592,878,511	600,074,800
Other sales for resale.....	55,716,113	36,913,038	13,803,075
REVENUE FROM ELECTRIC SERVICE			
Sales for resale, total.....	\$171,648,666	\$167,863,018	\$3,785,648
Sales to other electric utilities:			
Municipal distribution systems.....	16,594,096	16,238,130	355,966
Mutual or cooperative undertakings.....	277,519	102,355	175,164
Other electric companies.....	154,384,011	151,316,377	3,067,634
Other sales for resale.....	393,040	206,156	186,884

TABLE 39.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY MAJOR CLASSES OF SERVICE, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	TOTAL SALES TO ULTIMATE CONSUMERS <sup>1</sup>						STREET AND HIGHWAY LIGHTING			
	Number of customers	Current sold		Revenue from electric service		Number of customers	Current sold		Revenue from electric service	
		Kilowatt-hours	Average kilowatt-hours per customer	Amount	Average per census-toner (dollars)		Kilowatt-hours	Average kilowatt-hour per customer	Amount	Average per customer (dollars)
UNITED STATES	24,432,724	93,524,013,857	3,828	\$2,006,933,408	82	2.1	20,736	1,582,911,433	76,336	\$65,538,665
Geographic Divisions:										
New England	2,227,358	5,795,905,638	2,602	104,966,087	74	2.8	1,538	106,370,166	108,381	\$8,084,073
Middle Atlantic	7,205,646	27,182,160,221	3,772	602,488,834	84	2.2	4,009	521,809,533	130,160	23,559,171
East North Central	5,849,376	22,260,500,382	3,806	470,715,740	80	2.1	4,538	298,199,901	65,712	5,877,476
West North Central	5,107,674	6,666,734,739	2,878	155,376,485	74	2.6	3,533	149,573,903	42,336	5,561,405
South Atlantic	1,971,825	10,178,367,123	5,102	191,160,756	97	1.9	1,735	123,488,206	71,175	1,574,958
East South Central	873,462	3,559,140,268	4,507	75,156,057	86	1.9	1,168	64,452,047	55,119	2,062,210
West South Central	1,389,660	5,020,605,877	3,537	116,788,812	83	2.3	1,492	73,394,035	49,192	2,322,128
Mountain	673,770	3,624,160,217	5,379	64,349,762	96	1.8	773	42,410,255	54,894	1,784,157
Pacific	2,118,953	9,455,939,392	4,453	165,940,875	78	1.8	1,965	143,212,787	72,882	4,479,536
NEW ENGLAND:										
Maine	200,481	675,971,883	3,372	13,733,063	69	2.0	411	10,940,665	26,620	612,535
New Hampshire	131,671	304,834,153	2,315	9,234,780	70	3.0	211	43,117	587,995	1,460
Vermont and Rhode Island	208,161	758,000,218	2,827	21,312,092	79	2.8	204	18,229,169	69,050	2,758
Massachusetts	1,166,848	2,692,558,732	2,310	82,276,347	71	3.1	547	96,014,445	175,529	3,487
Connecticut	461,197	1,364,840,652	2,859	38,379,775	83	2.8	95	32,088,431	337,562	8,909
MIDDLE ATLANTIC:										
New York	3,764,464	14,138,740,669	3,756	313,224,533	83	2.2	1,627	311,989,255	191,757	12,222,087
New Jersey	1,164,483	3,051,911,945	2,555	92,483,142	77	3.0	637	83,036,390	126,387	7,512
Pennsylvania	2,246,699	9,991,507,607	4,447	196,781,159	88	2.0	1,725	126,783,888	73,498	7,363
EAST NORTH CENTRAL:										
Ohio	1,533,908	6,073,138,770	3,959	122,110,431	80	2.0	882	89,985,159	102,024	3,988,884
Indiana	628,294	2,266,202,566	3,655	51,318,416	82	2.2	884	51,269,740	61,110	4,534
Illinois	1,905,549	7,188,695,407	3,773	158,443,164	83	2.2	1,132	45,740,676	40,407	2,121
Michigan	1,150,527	4,813,638,690	4,184	93,278,513	81	1.9	884	61,332,890	78,541	1,684
Wisconsin	1,889,128	1,889,125,639	2,983	45,565,216	72	2.4	886	49,841,436	58,226	1,871

<b>West: North Central:</b>	<b>Minnesota.</b>	437,655	1,271,434,816	2,905	33,477,680	2,905	1,240,896	1,892	
Iowa.	432,021	1,100,056,794	2,546	29,101,637	68	656	30,677,109	4,0	
Missouri.	601,650	2,296,845,427	3,471	51,015,616	77	836	28,138,148	3.9	
North Dakota.	74,059	114,481,176	1,546	4,976,099	67	519	56,603,860	3.0	
South Dakota.	75,137	118,765,263	1,581	5,155,313	69	2,2	378	5,155,635	3.4
Nebraska.	176,976	479,265,950	2,742	18,342,088	75	4,3	4,977,106	5.9	
Kansas.	250,176	655,385,983	2,742	18,218,102	73	2,7	16,442	3.9	
<b>SOUTH: ATLANTIC:</b>	<b>Delaware, Maryland, and District of Columbia.</b>	575,051	2,485,920,047	4,323	48,428,310	84	1,9	195,249	4.8
Virginia.	311,375	1,165,976,096	3,745	25,610,042	83	2,2	239	46,664,617	9,351
West Virginia.	236,735	1,659,196,151	6,324	26,114,005	110	1,6	214	11,640,778	4.4
North Carolina.	204,766	1,791,692,985	6,767	28,572,242	108	1,6	288	4,011,433	2,036
South Carolina and Georgia.	349,417	2,540,819,276	7,272	40,754,575	117	1,6	27,671,467	1,627	
Florida.	224,491	654,956,668	2,367	21,426,532	91	3.9	14,252,180	4,604	
<b>EAST: SOUTH CENTRAL:</b>	<b>Kentucky.</b>	281,866	941,080,366	3,225	21,657,744	74	2.3	315	19,593,994
Tennessee.	282,288	1,234,064,129	4,372	24,509,478	87	2.0	196	62,222	2,550
Alabama and Mississippi.	304,338	1,783,995,770	5,862	28,938,835	95	1.6	12,702,179	503	
Arkansas.	126,269	410,276,500	3,249	10,820,157	86	2.6	272	1,707	4,1
Louisiana.	218,893	945,192,140	4,181	18,815,172	86	2.1	166	17,043,181	3.0
Texas.	266,437	909,383,154	3,546	21,423,243	84	2.4	328	11,982,616	3.8
708,001	2,785,754,083	3,491	65,730,240	82	2.4	726	30,352,017	2.5	
<b>MOUNTAIN:</b>	<b>Montana and Utah.</b>	206,030	2,082,892,064	10,158	23,582,923	114	1.1	315	15,635,291
Idaho.	80,682	506,651,272	6,593	7,929,965	87	1.6	121	4,950,526	3.5
Wyoming.	34,642	92,403,999	2,667	3,355,617	43	3.6	2,459,893	3,227	
Colorado.	201,161	517,515,958	2,573	16,020,324	80	3.1	12,683,774	2,036	
New Mexico and Arizona.	120,793	322,124,090	2,667	11,164,089	92	3.5	5,985,982	1,038	
Nevada.	20,554	92,570,124	4,504	2,286,817	112	2.5	1,352,869	503	
<b>PACIFIC:</b>	<b>Washington.</b>	335,705	1,783,244,379	5,237	25,302,935	75	1.4	288	16,098,560
Oregon.	288,440	1,022,389,350	3,956	19,315,631	75	1.9	234	18,189,807	1,506
California.	1,524,808	6,655,305,663	4,365	121,322,309	80	1.8	1,443	100,824,360	2,375

See footnotes at end of table.

TABLE 39.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY MAJOR CLASSES OF SERVICE, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937—Continued

DIVISION AND STATE		RESIDENTIAL OR DOMESTIC SALES				NONRESIDENTIAL OR COMMERCIAL SALES			
		Farm		Nonfarm		Commercial		Industrial	
Number of customers	Current sold Kilowatt-hours	Revenue from electric service		Number of customers	Current sold Kilowatt-hours	Revenue from electric service		Number of customers	Current sold Kilowatt-hours
		Average kilowatt-hours per customer	Average customer per kilowatt-hour (cents)			Average kilowatt-hours per customer	Average customer per kilowatt-hour (cents)		
UNITED STATES	556,244	603,285,669	1,085	\$22,736,263	41	3.8	19,365,677	14,821,015,856	770
GEOGRAPHIC DIVISIONS:									
New England	54,922	52,797,235	961	2,516,236	46	4.8	1,829,408	1,195,084,978	653
Middle Atlantic	85,826	96,301,595	1,084	1,046,357	46	4.2	6,382,303	4,045,441,380	680
East North Central	136,342	122,472,272	893	4,691,903	34	3.8	4,706,815	3,758,821,803	799
West North Central	6,534	6,006,830	919	2,750,524	41	4.5	1,278,288,111	1,637,655	781
South Atlantic	70,875	66,602,711	789	2,456,218	35	4.4	1,535,398	1,405,705,572	916
East South Central	16,591	18,488,892	1,114	620,161	37	3.4	670,459	597,461,343	891
West South Central	9,716	13,876,301	1,343	451,187	3.5	1,074,422	750,291,755	698	22,088,183
Mountain	43,845	54,651,314	1,246	1,920,560	44	3.5	610,147	427,897,355	693
Pacific	126,583	182,919,439	1,422	5,736,527	45	3.1	1,639,070	1,402,033,559	950
NEW ENGLAND:									
Maine	16,555	10,757,683	650	578,001	36	5.4	148,788	94,108,719	638
New Hampshire	8,450	6,755,297	769	346,885	41	5.1	102,037	62,481,142	612
Vermont and Rhode Island	6,188	5,775,374	932	284,127	46	4.9	221,164	134,181,669	607
Massachusetts	13,224	13,876,301	1,049	682,996	52	4.9	971,113	580,056,581	697
Connecticut	10,455	15,602,580	1,492	622,257	60	4.0	386,311	324,266,867	839
MIDDLE ATLANTIC:									
New York	46,228	49,572,629	1,072	2,056,059	44	4.1	3,084,552	2,020,700,828	655
New Jersey	13,551	16,343,151	1,206	775,535	57	4.7	984,669	639,554,867	650
Pennsylvania	29,047	30,385,815	1,046	1,216,763	42	4.0	1,793,082	1,385,185,685	773
EAST NORTH CENTRAL:									
Ohio	46,104	43,694,239	948	1,823,419	40	4.2	1,228,044	985,150,600	802
Indiana	11,659	10,056,768	857	455,375	39	4.6	482,032	326,463,777	677
Illinois	857	671,706	784	411,902	49	6.2	1,601,866	1,227,555,685	766
Michigan	76,059	66,376,815	873	2,306,537	30	3.5	914,184	819,766,687	897
Wisconsin	1,623	1,659,804	1,047	67,770	42	4.0	480,669	399,875,054	832

See footnotes at end of table.

TABLE 39.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY MAJOR CLASSES OF SERVICE, PRIVATELY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937—Continued

DIVISION AND STATE	COMMERCIAL AND INDUSTRIAL SALES*											
	Farm			Nonfarm								
	Number of customers	Current sold	Revenue from electric service	Number of customers	Current sold	Revenue from electric service						
	Kilowatt-hours	Average kilowatt-hours per customer	Average per customer per kilo-watt-hour (\$cents)		Kilowatt-hours	Average kilowatt-hours per customer						
United States.....	537,138	1,862,265,944	3,467	\$43,370,293	81	2.3	3,886,793	65,897,076,578	16,954	\$1,129,870,988	291	1.7
GEOGRAPHIC DIVISIONS:												
New England.....	2,956	7,406,745	2,506	\$23,160	109	4.4	333,933	4,197,441,775	12,570	\$8,740,838	266	2.1
Middle Atlantic.....	86,102	146,045,537	1,707	5,495,057	64	3.7	1,155,470	10,118,605,194	16,546	337,240,420	202	1.8
East North Central.....	188,901	157,164,832	1,021	8,979,053	49	4.8	804,232	15,749,688,100	19,882	271,639,166	338	1.7
West North Central.....	66,184	64,025,673	1,027	3,854,077	58	6.0	388,677	4,022,177,790	10,477	84,236,083	217	2.1
South Atlantic.....	24,635	40,424,795	1,641	1,456,644	59	3.6	333,738	7,916,904,708	23,722	118,517,378	355	1.5
East South Central.....	31,656	34,373,140	1,086	1,473,784	47	4.3	154,678	4,085,731,019	19,820	46,170,695	208	1.5
West South Central.....	30,693	32,535,982	1,089	2,488,012	81	3.0	3,748,888	12,122	13,677	68,733,839	251	1.8
Mountain.....	4,105	63,000,654	16,565	902,201	242	1.5	112,660	2,665,837,048	25,678	37,173,360	320	1.4
Pacific.....	106,906	1,230,685,656	11,513	18,303,305	171	1.5	5,361,821,822	16,282	77,413,221	285	1.4	
NEW ENGLAND:												
Maine.....	347	202,016	582	10,696	31	5.3	32,539	535,540,368	16,458	7,230,256	222	1.4
New Hampshire.....	839	1,041,997	1,172	56,983	64	5.5	{ 19,570	216,361,657	11,056	4,510,301	230	2.1
Vermont and Rhode Is- land <sup>2</sup> .....	566	5,071,017	4,394	201,792	175	4.0	{ 39,166	563,608,067	14,390	11,685,339	288	2.1
Massachusetts.....	1,154	1,091,715	1,920	53,689	95	4.9	{ 178,968	1,953,725,593	10,805	44,686,796	250	2.3
Connecticut.....	566	1,091,715	1,920	53,689	95	4.9	{ 63,690	948,205,590	14,888	20,628,146	324	2.2
MIDDLE ATLANTIC:												
New York.....	38,849	36,790,960	947	1,766,264	45	4.8	569,232	9,828,227,018	16,651	175,588,471	297	1.8
New Jersey.....	47,253	110,157,547	2,331	3,728,793	79	3.4	{ 157,556	2,071,822,601	11,046	48,391,520	258	2.3
Pennsylvania.....							{ 377,632	7,218,555,575	16,113	113,260,438	300	1.6
EAST NORTH CENTRAL:												
Ohio.....	52,995	41,198,040	777	2,311,760	44	5.6	199,722	4,436,298,244	22,212	70,045,370	351	1.6
Indiana.....	34,846	31,366,414	900	1,515,878	44	4.8	94,748	1,706,729,522	18,013	29,610,696	313	1.7
Illinois.....	41,495	43,165,477	1,040	2,147,503	52	5.0	2,071	4,501,490,448	17,504	89,017,771	343	2.0
Michigan.....	4,090	25,495,114	6,374	327,723	82	1.3	154,640	3,696,652,511	23,924	57,985,819	375	1.6
Wisconsin.....	50,565	46,539,787	920	2,676,189	53	5.8	95,901	1,345,498,375	14,630	24,969,501	260	1.9

for the use of public utilities and its jurisdiction as Account No. 601, 133,567 customers. The company's service area covers a large portion of the state of Kansas, including some residential and commercial sales principally, although it is probable

<sup>1</sup> Includes statistics for "Rural—district rural rates only," which cover rural sales as outlined by the "Uniform system of accounts" prescribed by the Federal Power Com-

TABLE 40.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY MAJOR CLASSES OF SERVICE, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937

DIVISION AND STATE	TOTAL SALES TO ULTIMATE CONSUMERS <sup>1</sup>				STREET AND HIGHWAY LIGHTING			
	Number of customers	Revenue from electric service		Current sold	Revenue from electric service		Average kilowatt-hour per customer	Average price per kilowatt-hour (cents)
		Kilowatt-hours	Average per customer		Kilowatt-hours	Amount		
United States	2,656,968	5,674,398,803	2,136	\$140,544,540	56	2,6	2,207	270,088,885
GEOGRAPHIC DIVISIONS:								
New England:								
New England	178,693	262,706,683	1,638	9,000,732	50	3.1	227	18,025,010
Middle Atlantic	145,680	240,944,690	1,664	7,799,785	54	3.2	89	13,416,913
East North Central	577,403	1,221,061,807	2,115	32,827,316	57	2.7	301	74,791,709
West North Central	472,883	714,201,495	1,510	23,979,941	51	3.4	232	27,456,713
South Atlantic	273,502	495,102,654	1,777	17,763,126	65	3.7	63	19,545,129
East South Central	78,191	136,063,502	1,740	4,196,058	54	3.1	31	1,805,023
West South Central	161,285	237,080,305	1,470	9,080,404	56	3.8	82	8,412,281
Mountain	77,932	115,643,349	1,484	4,093,105	53	3.5	32	5,175,052
Pacific	691,339	2,230,615,128	3,267	40,804,073	59	1.8	1,172	10,400,455
NEW ENGLAND:								
Maine	6,966	7,297,114	1,048	290,010	42	4.0	10	357,825
New Hampshire	4,611	5,241,125	1,137	205,895	45	3.9	4	343,020
Vermont and Rhode Island	15,705	29,684,069	1,878	882,704	56	3.0	12	608,554
Massachusetts	120,014	211,185,771	1,637	6,288,286	49	3.0	190	14,447,695
Connecticut	22,307	39,317,604	1,763	1,333,737	60	3.4	11	2,206,907
MIDDLE ATLANTIC:								
New York	79,358	149,638,075	1,886	4,244,757	53	2.8	63	10,455,272
New Jersey	18,102	20,577,432	1,137	1,014,964	56	4.9	13	851,970
Pennsylvania	48,200	70,729,083	1,467	2,540,064	53	3.6	13	2,109,671
EAST NORTH CENTRAL:								
Ohio	187,748	403,870,483	2,151	10,772,534	57	2.7	139	51,357,431
Indiana	139,623	273,082,039	1,956	7,789,719	56	2.9	312	4,105,263
Illinois	66,794	116,205,376	1,740	3,602,696	54	3.1	12	342,105
Michigan	107,456	264,283,526	2,460	6,307,655	61	2.5	10	10,072,006
Wisconsin	75,782	163,631,383	2,159	4,154,812	55	2.5	119	9,257,009

<b>West North Central:</b>	<b>148</b>	<b>464,506</b>	<b>5,684,320</b>	<b>57</b>	<b>3.8</b>	<b>65</b>	<b>8,610,197</b>	<b>132,003</b>	<b>273,667</b>	<b>4,210</b>
Minnesota-----	99	215	1,486	1,172	3,628,494	48	4.1	25	1,323,882	52,955
Iowa-----	74	983	894,014	1,325	3,085,460	43	3.2	16	2,407,223	136,076
Missouri-----	76	469	106,186	1,194	1,717,422	55	4.2	5	146,779	29,356
North Dakota-----	57	792	7,184,948	27	1,194,633	66	4.1	18	3,150,028	115,002
South Dakota-----	17	1,024	96,159	1,597	1,126,443	66	4.1	116	6,224,245	53,657
Nebraska-----	83	442	96,718,602	1,159	3,578,471	43	2.7	37	6,495,361	143,432
Kansas-----	116	953	244,338,696	2,107	6,336,331	65	2.6		145,523	136,057
<b>South Atlantic:</b>	<b>28</b>	<b>873,974</b>	<b>1,470</b>	<b>1,111,615</b>	<b>57</b>	<b>3.8</b>	<b>10</b>	<b>2,224,554</b>	<b>222,455</b>	<b>56,121</b>
Delaware, Maryland, and District of Columbia-----	19	641	46,579,678	1,836	1,550,022	64	3.3	9	1,603,238	178,138
Virginia-----	24	219	3,407,220	1,291	4,108,535	47	3.7	23	5,102,924	221,866
West Virginia-----	2	329	116,826,112	1,546	4,508,026	60	3.9	4	1,611,892	239,608
North Carolina-----	75	926	38,285,603	1,600	3,119,971	55	3.4	9	950,518	180,104
South Carolina-----	44	565	63,701,347	1,429	3,407,129	55	3.9	12	9,056,327	754,694
Georgia-----	83	267	188,328,720	2,294	6,897,047	50	3.6		337,441	28,120
Florida-----										
<b>East South Central:</b>	<b>23</b>	<b>289</b>	<b>28,437,475</b>	<b>1,294</b>	<b>1,013,874</b>	<b>44</b>	<b>3.4</b>	<b>10</b>	<b>300,463</b>	<b>80,046</b>
Kentucky-----	16	504	32,119,727	1,946	947,773	57	3.0	8	468,721	10,946
Tennessee-----	18	163	35,070,254	1,965	985,333	54	2.8	13	595,439	50,590
Alabama-----	20	246	38,835,946	1,918	1,248,078	62	3.2		466,439	10,562
Mississippi-----										
<b>West South Central:</b>	<b>20</b>	<b>394</b>	<b>25,781,103</b>	<b>1,264</b>	<b>1,004,353</b>	<b>49</b>	<b>3.9</b>	<b>59</b>	<b>2,301,053</b>	<b>39,001</b>
Arkansas-----	34	447	45,809,900	1,272	2,083,188	60	4.8		281,987	43,070
Louisiana-----	51	171	64,302,349	1,257	2,677,468	52	4.2	7	4,137,530	295,538
Oklahoma-----	55	273	103,166,943	1,886	3,115,305	60	3.2	14		
Texas-----										
<b>Mountain:</b>	<b>532</b>	<b>104,587</b>	<b>701</b>	<b>33,677</b>	<b>63</b>	<b>8.3</b>	<b>6</b>	<b>414,193</b>	<b>69,032</b>	<b>4,414</b>
Montana-----	8	486	24,620,674	2,001	583,595	69	6.6			
Idaho-----	4,985	5,388,411	1,106	301,629	62	6.6				
Wyoming-----	34	613	50,150,701	1,453	1,884,801	63	3.7	24	8,072,127	128,005
Colorado-----	5	523	8,015,232	1,506	386,230	73	4.8	6	308,360	51,393
New Mexico and Arizona-----	22	652	24,009,089	1,059	821,600	36	3.4	11	1,138,623	103,611
Utah-----	1	151	3,044,595	1,983	131,673	35	4.3	5	48,390	6,180
Nevada-----										
<b>Pacific:</b>	<b>142</b>	<b>379</b>	<b>667,497,680</b>	<b>4,672</b>	<b>8,865,184</b>	<b>62</b>	<b>1.3</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
Washington-----	16	177	42,530,702	2,829	1,042,344	2,0				
Oregon-----	535	283	1,520,186,746							

See footnotes at end of table.

TABLE 40.—SALES TO ULTIMATE CUSTOMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY MAJOR CLASSES OF SERVICE, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES: 1937—Continued

DIVISION AND STATE		RESIDENTIAL OR DOMESTIC SALES					
		Farm			Nonfarm		
		Number of cus- tomers	Current sold		Revenue from electric service		Number of cus- tomers
			Kilowatt- hours	Average kilowat- hours per customer	Amount	Average per cus- tomer (dollars)	
UNITED STATES		32,048	24,750,713	772	\$1,089,669	34	4,4
GEOGRAPHIC DIVISIONS:							
New England		1,346	1,384,318	1,028	52,553	39	3.8
Middle Atlantic		3,742	2,712,494	725	103,851	29	4.0
East North Central		6,042	4,470,917	740	199,423	33	4.5
West North Central		9,063	6,913,187	763	295,768	33	4.3
South Atlantic		7,720	5,988,681	775	302,637	39	5.1
East South Central		7,836	4,482,275	536	14,904	18	3.3
West South Central		1,250	912,843	749	55,136	44	5.8
Mountain		1,486	1,233,170	831	38,513	26	3.1
Pacific		554	639,828	1,491	20,814	38	3.2
NEW ENGLAND:							
Maine		95	64,593	680	3,488	36	5.3
New Hampshire		438	418,867	1,041	17,378	40	3.9
Vermont and Rhode Island		820	870,558	1,062	31,737	39	3.6
Massachusetts							
Connecticut							
MIDDLE ATLANTIC:							
New York		(3)	(2)	(3)	(4)	(3)	
New Jersey							
Pennsylvania							
EAST NORTH CENTRAL:							
Ohio		2,201	1,641,164	746	73,579	33	4.5
Indiana		1,673	1,241,504	742	53,745	32	4.3
Illinois		457	227,583	499	14,484	32	6.4
Michigan		1,367	1,187,316	869	47,638	35	4.0
Wisconsin			173,051	503	9,987	29	5.8

see footnotes at end of table.

TABLE 40.—SALES TO ULTIMATE CONSUMERS—NUMBER OF CUSTOMERS, CURRENT SOLD, AND REVENUE FROM ELECTRIC SERVICE, BY MAJOR CLASSES<sup>1</sup> OF SERVICE, MUNICIPALLY OWNED ELECTRIC UTILITIES, BY DIVISIONS AND STATES; 1937—Continued

DIVISION AND STATE	COMMERCIAL AND INDUSTRIAL SALES <sup>4</sup>				Nonfarm				
	Farm		Nonfarm		Current sold		Revenue from electric service		
Number of customers	Kilowatt-hours	Average kilowatt-hours per customer	Revenue from electric service	Kilowatt-hours	Average kilowatt-hours per customer	Amount	Revenue from electric service		
UNITED STATES	33,626,751	1,182	\$1,294,686	45	3.9	412,105	3,129,494,586	7,594	
<sup>Geographic divisions:</sup>									
New England:									
New England:	1,346	840,939	625	38,883	29	4.6	143,867,750	6,988	
Middle Atlantic:	1,050	3,783,338	3,608	91,679	87	2.4	113,744,116	6,238	
New England:	12,458	14,980,721	1,202	637,334	43	3.6	801,416	2,998,735	
West, North Central:	5,439	5,178,720	952	278,596	51	5.4	71,263	13,471,310	
South Atlantic:	3,782	3,103,093	820	1,012	33,353	43	5.2	334,881,797	4,699
East, South Central:	6,666	6,674,906	1,012	33,353	50	4.9	60,593,271	7,985,027	
West, South Central:	2,152	1,386,286	644	71,747	33	5.2	26,916	104,833,076	1,644,242
Mountain:	357	1,557,854	4,364	29,668	83	1.9	49,905,786	3,895	
Pacific:	1,210	2,116,304	1,749	50,916	42	2.4	120,149	1,417,587,360	11,709
NEW ENGLAND:									
Maine:	(2)	(2)	(2)	(2)	(2)	(2)	1,160	2,927,513	2,524
New Hampshire:	(2)	(2)	(2)	(2)	(2)	(2)	1,565	1,805,906	3,186
Vermont and Rhode Island:	(2)	(2)	(2)	(2)	(2)	(2)	2,012	15,232,155	7,581
Massachusetts:							13,684	100,529,727	7,357
Connecticut:							3,155	23,232,449	7,370
MIDDLE ATLANTIC:									
New York:							12,567	75,448,003	6,004
New Jersey:							1,873	1,805,906	3,186
Pennsylvania:							4,755	8,362,800	4,433
Connecticut:							35,953,312	7,570	955,280
EAST NORTH CENTRAL:									
Ohio:	2,237	2,025,856	906	85,251	38	4.2	23,293	213,847,817	9,181
Indiana:	4,420	7,135,820	1,614	192,889	44	2.7	18,540	134,922,933	7,277
Illinois:	149	94,345	653	8,381	56	8.9	7,423	46,143,406	1,091,025
Michigan:	2,150	2,686,323	1,219	97,286	45	3.6	12,921	152,415,086	2,982,499
Wisconsin:	3,502	3,038,377	868	153,537	44	6.1	14,282	88,472,164	6,895

## ELECTRIC LIGHT AND POWER INDUSTRY

<sup>1</sup> Includes statistics for "Street and interurban railways," "Electrified steam-railroad divisions," "Interterritorial," "Other services to public authorities," and "Other sole authority or consumer." These classes of service are not shown separately in this table.

<sup>2</sup> Combined to avoid disclosing the operations of individual establishments.

<sup>3</sup> Statistics for STEs cannot be shown without disclosing individual establish-

卷之三

TABLE 41.—NUMBER OF SALARIED EMPLOYEES AND WAGE EARNERS, AND SALARIES AND WAGES PAID, PRIVATELY OWNED AND MUNICIPALLY OWNED ELECTRIC UTILITIES: 1937

	Total	Privately owned electric utilities	Municipally owned electric utilities
Employees:			
Number on June 30, 1937.....	278,042	255,155	22,887
Number on Dec. 31, 1937.....	273,491	251,171	22,320
Salaries and wages for year.....	\$465,314,210	\$432,659,746	\$32,654,464
Salaried employees: <sup>1</sup>			
Number on June 30, 1937.....	122,782	113,387	9,395
Number on Dec. 31, 1937.....	122,195	112,938	9,257
Salaries.....	\$220,184,803	\$207,049,652	\$13,135,151
Wage earners:			
Number on June 30, 1937.....	155,260	141,768	13,492
Number on Dec. 31, 1937.....	151,296	138,233	13,063
Wages.....	\$245,129,407	\$225,610,094	\$19,518,313

<sup>1</sup> Includes superintendents, managers, clerks, stenographers, and supervisory and office employees.

TABLE 42.—CONSOLIDATED BALANCE SHEET FOR PRIVATELY OWNED ELECTRIC UTILITIES, INCLUDING ASSETS AND LIABILITIES OF ALLIED NONELECTRIC UTILITIES AS OF DEC. 31, 1937<sup>1</sup>

ASSETS AND OTHER DEBITS	LIABILITIES AND OTHER CREDITS
3 Utility plant, total.....	\$14,048,706,100
Electric.....	11,936,205,264
Gas.....	1,370,493,448
Electric railway.....	263,179,509
Other.....	478,827,879
Investments and funds.....	1,308,120,532
Current and accrued assets.....	972,491,998
Deferred debits.....	494,082,844
Capital stock discount and expense.....	33,555,494
Reacquired securities.....	43,005,496
Deficit.....	33,671,306
Total assets and other debits.....	16,933,633,770
11 Capital stock.....	\$6,540,461,437
12 Investment of unincorporated undertakings.....	2,987,728
13 Long-term debt.....	6,837,591,858
14 Current and accrued liabilities.....	707,519,769
15 Deferred credits.....	42,348,722
16 Reserve for depreciation of electric plant.....	1,346,425,840
17 Other reserves.....	385,286,896
18 Contributions in aid of construction.....	36,428,566
19 Surplus.....	1,034,582,954
Total liabilities and other credits.....	16,933,633,770

<sup>1</sup> Companies operating on a fiscal year basis reported balance-sheet statistics as of the last day of their fiscal year.

$$7 = A \cdot D^{-4}$$

$$12 = X \cdot D$$

TABLE 43.—CONSOLIDATED INCOME, OPERATING-REVENUE, AND EXPENSE STATEMENT, AND DIVIDEND APPROPRIATIONS FOR PRIVATELY OWNED ELECTRIC AND ALLIED NONELECTRIC UTILITIES: 1937

ACCOUNT	Total	Electric light and power	Other utilities
Operating revenues	\$2,603,318,830	\$2,207,108,652	\$396,210,178
Operating expenses	1,203,911,334	1,946,416,262	257,495,072
Depreciation	254,779,063	217,656,222	37,122,841
Taxes	359,603,642	312,270,755	47,332,887
Federal	121,496,425	112,381,945	9,114,480
Other	238,107,217	199,888,810	38,218,407
Other operating revenue deductions	1,303,596	605,636	697,960
Total operating revenue deductions	1,819,597,635	1,476,948,875	342,648,760
Net operating revenues	783,721,195	730,159,777	53,561,418
Income from utility plants leased to others	3,637,312	3,569,814	67,498
Total utility operating income	787,358,507	733,729,591	53,028,916
Other income	61,972,429	(2)	(2)
Gross income	849,330,936	(2)	(2)
Income deductions:			
Interest on long-term debt	289,507,148	(2)	(2)
Amortization of debt discount (or premium) and expense	19,405,420	(2)	(2)
Other income deductions	26,237,489	(2)	(2)
Total income deductions	335,150,066	(2)	(2)
Net income	514,180,870	(2)	(2)

## DIVIDEND APPROPRIATIONS AND CASH DISTRIBUTIONS

	Total
Dividend appropriations:	
Preferred stock	\$126,327,501
Common stock	307,027,298
Authorized cash distributions by unincorporated undertakings	332,401

<sup>1</sup> Includes cost of fuel, \$165,758,049; purchased and interchanged power, \$166,864,166; maintenance expense, \$125,579,914; and other operating expenses, \$488,214,133.

<sup>2</sup> Segregation of "Electric light and power" and "Other utilities" not called for on schedule.

TABLE 44.—CONSOLIDATED BALANCE SHEET FOR MUNICIPALLY OWNED ELECTRIC UTILITIES, INCLUDING ASSETS AND LIABILITIES OF ALLIED NONELECTRIC UTILITIES AS OF DEC. 31, 1937<sup>1</sup>

ASSETS AND OTHER DEBITS	LIABILITIES AND OTHER CREDITS
Utility plant, total	\$794,308,100
Electric	701,670,820
Gas	9,408,011
Electric railway	171,320
Other	83,057,949
Investments and funds	48,600,494
Current and accrued assets	76,970,013
Deferred debits	9,272,484
Reacquired securities	329,314
Deficit	394,193
Total assets and other debits	929,883,598
Investment of municipalities	\$250,996,674
Long-term debt	249,019,624
Current and accrued liabilities	22,450,664
Deferred credits	5,001,132
Reserve for depreciation of electric plants	132,713,490
Other reserves	26,308,912
Contribution in aid of construction	11,350,390
Surplus	232,036,712
Total liabilities and other credits	929,883,598

<sup>1</sup> Municipalities operating on a fiscal year basis reported balance sheet statistics as of the last day of their fiscal year.

TABLE 45.—CONSOLIDATED INCOME, OPERATING-REVENUE, AND EXPENSE STATEMENT, FOR MUNICIPALLY OWNED ELECTRIC AND ALLIED NONELECTRIC UTILITIES: 1937

Account	Total	Electric light and power	Other utilities
Operating revenues.....	\$168,287,648	\$154,976,216	\$13,311,432
Operating expenses.....	87,786,750	180,131,176	7,655,574
Depreciation.....	18,897,484	17,136,506	1,760,978
Taxes.....	2,635,249	2,325,305	309,944
Federal.....	94,061	88,929	5,132
Other.....	2,541,188	2,236,376	304,812
Other operating revenue deductions.....	526,649	435,090	91,559
Total operating revenue deductions.....	109,846,132	100,028,077	9,818,055
Net operating revenues.....	58,441,516	54,948,139	3,493,377
Income from utility plants leased to others.....	165,009	165,009	-----
Total utility operating income.....	58,606,525	55,113,148	3,493,377
Other income.....	1,552,352	(?)	(?)
Gross income.....	60,158,877	(?)	(?)
Income deductions:			
Interest on long-term debt.....	9,353,077	(?)	(?)
Amortization of debt discount (or premium) and expense.....	839,623	(?)	(?)
Other income deductions.....	785,218	(?)	(?)
Total income deductions.....	10,977,918	(?)	(?)
Net income.....	49,180,959	(?)	(?)
Authorized cash distributions to municipalities.....			\$15,530,246

<sup>1</sup> Includes cost of fuel, \$14,585,948; purchased and interchanged power, \$17,178,196; maintenance expense, \$19,311,955; and other operating expenses, \$29,065,077.

<sup>2</sup> Segregation of "Electric light and power" and "Other utilities" not called for on schedule.